

TIERHOUT



No. 26

Brass-Galvanized-Marine
Refrigerator and Cabinet
HARDWARE

Tel. Cortland 7-3170

W. & J.
TIEBOUT
NEW YORK

ESTABLISHED 1852
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NEW YORK DIVISION

Recd. 2:55 pm

Manufacturers and Jobbers of

Brass, Galvanized,
Marine, Cabinet,
and Refrigerator
Hardware

Catalogue No. 26

118 Chambers Street, New York, N. Y.

Cable Address: TARBOUT
Western Union Code, 5 Letter Edition

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W. & J. Tiebout

TIEBOUT'S

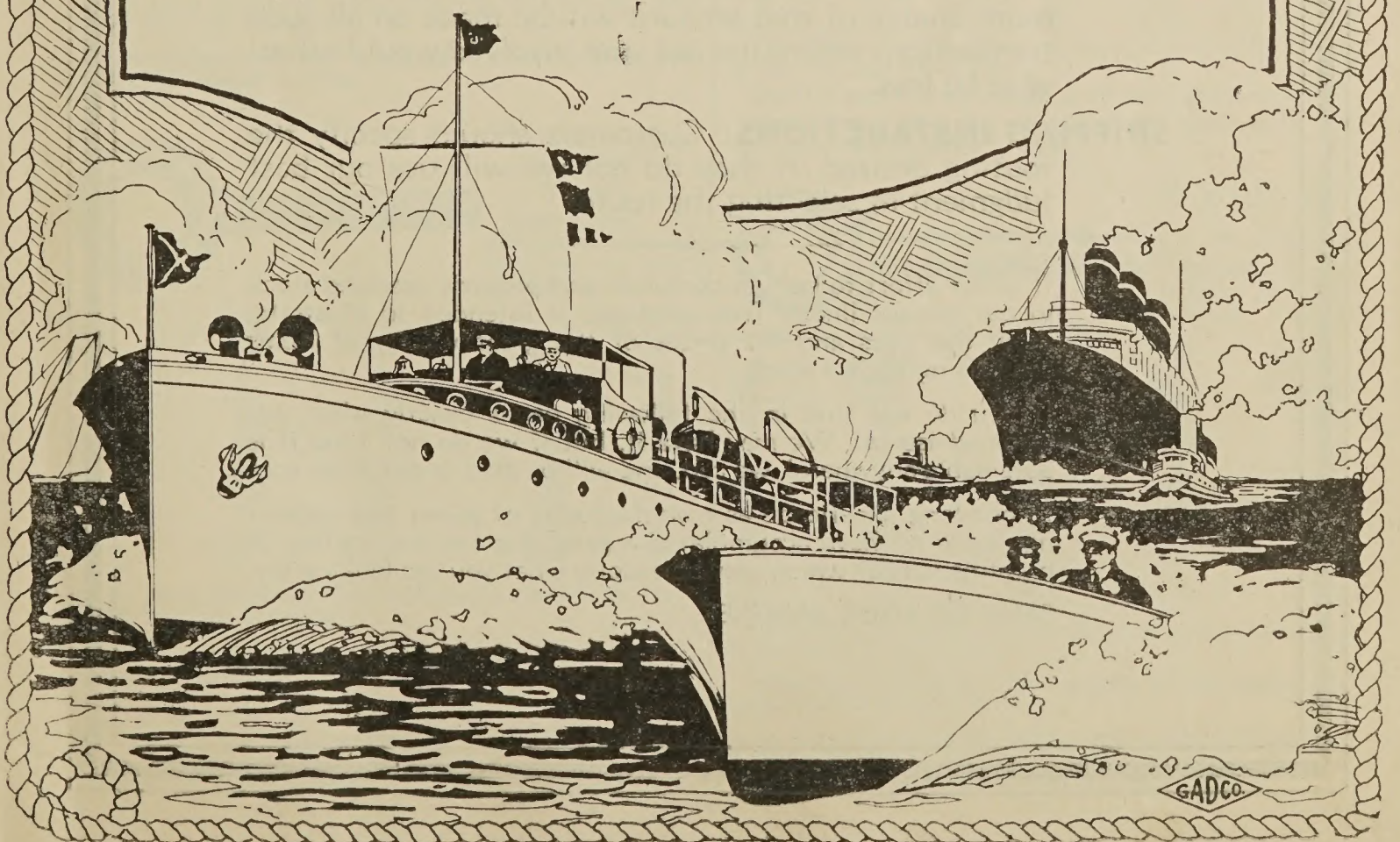
LOCKS AND LATCHES FOR DOORS AND HATCHES

MARINE HARDWARE

FOR over three-quarters of a century we have remained faithful to the highest standards of quality and fair dealing and although we maintain that there is no such thing as perfectly co-ordinated service, our years of experience have enabled us to come exceedingly close to the ultimate goal—perfect service.

It is for these reasons that we are privileged to serve, year after year, many of America's largest and best known builders of fine boats.

On this basis of honest and experienced service we invite new business.



Important Information

PRICE: Prices in this catalogue are list prices and may not represent actual selling prices. They are subject to change without notice. All prices are F.O.B. New York unless specifically quoted otherwise.

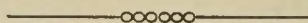
ADJUSTMENTS: All our shipments are double checked and weighed; when errors occur we will correct them to the customer's entire satisfaction. Claims for shortages must be made within ten days after receipt of material.

RETURN GOODS: Material made to order, or ordered especially for you is not returnable. When stock material has been properly furnished on order, it will not be accepted for return, unless permission to do so has been granted by us; such goods not in original packages or in unsalable condition are not returnable.

RATING: Orders from firms or individuals unknown to us and having no commercial rating must be accompanied by cash or satisfactory references. C.O.D. orders must be accompanied by a deposit of at least 25 per cent of the amount involved.

MINIMUM CHARGE: Due to bookkeeping costs we find it impracticable to carry on our books, or make C.O.D. shipments, of charges less than fifty cents. A minimum charge of that amount will be made on all such transactions where the net sum involved would otherwise be less.

SHIPPING INSTRUCTIONS: Customers should specify the routing desired, if they do not we will use our best judgment in selecting the route.



It is our effort to carry a complete and properly assorted stock in our various lines. This catalogue is intended to illustrate, show the sizes and list prices of the great variety of items comprising such a stock.

If you do not find in the following pages exactly what you want advise us. We may have it, but if we do not (and it is obtainable anywhere) we can, and will be glad to get it for you.

In our long experience as manufacturers of joiner and cabinet hardware we have accumulated a great number and variety of patterns, one of which may be exactly what you are looking for.

SEND US YOUR SAMPLES.

EYE BOLTS



REGULAR EYE
TO SCREW
No. 6169

Drop forged and hot
galvanized. Can be fur-

nished with smaller eye on order.

| Size, Inches | Length Under Eye Inches | Inside Diam. of Eye Inches | Galvanized, Each | * Additional Length Inch, Each |
|-----------------|-------------------------------|----------------------------------|---------------------|--------------------------------------|
| 1/4 | 2 | 1/2 | \$0.10 | \$0.03 |
| 5/16 | 2 1/4 | 5/8 | .12 | .04 |
| 3/8 | 2 1/2 | 3/4 | .14 | .04 |
| 1/2 | 3 1/2 | 1 | .21 | .05 |
| 5/8 | 4 | 1 1/4 | .33 | .06 |
| 3/4 | 4 1/2 | 1 1/2 | .60 | .08 |
| 7/8 | 5 | 1 3/4 | .85 | .09 |
| 1 | 6 | 2 | 1.00 | .11 |
| 1 1/4 | 8 | 2 1/2 | 1.90 | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

REGULAR EYE
WITH NUT
No. 6173

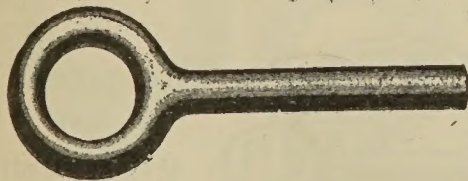
Drop forged and hot gal-
vanized; with hot pressed,
galvanized hexagon nuts.
Cut threads. Can be furnished to order with smaller eyes.



| Regular Lengths | | | | Extra Lengths | | |
|-----------------|--------------------------------|-----------------------------------|---------------------|--------------------------------|----------------|--------------------------------------|
| Size, Inches | Length Under Eye, Inches | Inside Diam. of Eye, Inches | Galvanized, Each | Length Under Eye, Inches | Galv., Each | * Additional Length Inch, Each |
| 1/4 | 2 | 1/2 | \$0.14 | 4 | \$0.18 | \$0.03 |
| 5/16 | 2 1/4 | 5/8 | .16 | 4 1/4 | .22 | .04 |
| 3/8 | 2 1/2 | 3/4 | .18 | 4 1/2 | .24 | .04 |
| 1/2 | 3 1/4 | 1 | .28 | 6 | .38 | .05 |
| 5/8 | 4 | 1 1/4 | .45 | 6 | .60 | .06 |
| 3/4 | 4 1/2 | 1 1/2 | .75 | 6 1/2 | .90 | .08 |
| 7/8 | 5 | 1 3/4 | 1.15 | 8 | 1.40 | .09 |
| 1 | 6 | 2 | 1.50 | 9 | 1.75 | .11 |
| 1 1/4 | 8 | 2 1/2 | 2.40 | 11 | 3.00 | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

Note—Larger sizes and extra lengths of both regular and
small eye furnished to order.



REGULAR EYE
TO RIVET
No. 6171

Drop forged; hot
galvanized. Can be
furnished to order
with smaller eyes.

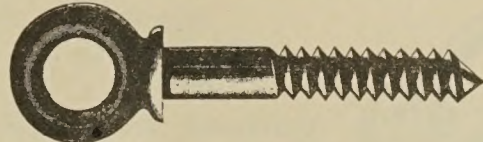
| Size, Inches | Length Under Eye Inches | Inside Diam. of Eye, Inches | Galvanized, Each | * Additional Length Inch, Each |
|-----------------|-------------------------------|-----------------------------------|---------------------|--------------------------------------|
| 1/4 | 4 | 1/2 | \$0.12 | \$0.03 |
| 5/16 | 4 1/4 | 5/8 | .14 | .04 |
| 3/8 | 4 1/2 | 3/4 | .16 | .04 |
| 1/2 | 6 | 1 | .25 | .05 |
| 5/8 | 6 | 1 1/4 | .40 | .06 |
| 3/4 | 6 1/2 | 1 1/2 | .70 | .08 |
| 7/8 | 7 | 1 3/4 | 1.10 | .09 |
| 1 | 8 | 2 | 1.25 | .11 |
| 1 1/4 | 11 | 2 1/2 | 2.30 | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

Note—Larger sizes and extra lengths of both regular and
smaller eye furnished to order.

All wrought eye bolts, ring bolts, etc., are galvanized by
the durable hot dipped process that withstands any of the
exacting engineering tests specified for determining the
durability of a zinc coating.

SHOULDER EYE BOLTS



REGULAR EYE
TO SCREW
No. 6177

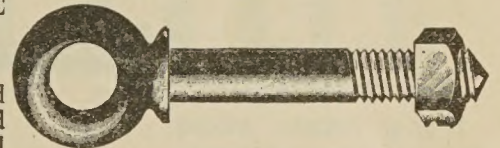
Galvanized and
brass. Drop forged
and hot galvanized or polished cast brass. Can also be
furnished to order with larger eyes.

| Size, Inches | Length Under Shoulder, Inches | Inside Diam. of Eye, Inches | Each | | * Additional Length Inch, Galv. Each |
|-----------------|--|-----------------------------------|------------|--------|--|
| | | | Galvanized | Brass | |
| 1/4 | 2 | 3/8 | \$0.13 | \$0.35 | \$0.03 |
| 5/16 | 2 1/4 | 7/16 | .16 | .40 | .04 |
| 3/8 | 2 1/2 | 1/2 | .19 | .55 | .04 |
| 1/2 | 3 1/4 | 5/8 | .26 | .75 | .05 |
| 5/8 | 4 | 7/8 | .48 | 1.25 | .06 |
| 3/4 | 4 1/2 | 1 1/16 | .85 | .... | .08 |
| 7/8 | 5 | 1 1/4 | 1.30 | .... | .09 |
| 1 | 6 | 1 7/16 | 1.50 | .... | .11 |
| 1 1/4 | 8 | 1 3/4 | 2.80 | .... | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

REGULAR EYE
WITH NUT
No. 6179

Galvanized and
brass. Drop forged
and hot galvanized
or polished cast brass. Cut threads; hexagon nuts. Can be
furnished to order with larger eye.



| Regular Lengths | | | | Extra Lengths | | | |
|-----------------|--|--------|--------|---------------------------------------|--------|-------|--|
| Size, Inches | Length Under Shoulder, Inches | Galv. | Brass | Length Under Shoulder Inches | Galv. | Brass | * Additiona Lgth. Inch, Galv., Ea. |
| 1/4 | 2 | \$0.18 | \$0.35 | 4 | \$0.24 | .... | \$0.03 |
| 5/16 | 2 1/4 | .21 | .40 | 4 1/4 | .28 | .... | .04 |
| 3/8 | 2 1/2 | .23 | .55 | 4 1/2 | .30 | .... | .04 |
| 1/2 | 3 1/4 | .35 | .75 | 6 | .43 | .... | .05 |
| 5/8 | 4 | .60 | 1.25 | 6 | .70 | .... | .06 |
| 3/4 | 4 1/2 | 1.00 | .... | 6 1/2 | 1.15 | .... | .08 |
| 7/8 | 5 | 1.45 | .... | 8 | 1.70 | .... | .09 |
| 1 | 6 | 1.90 | .... | 9 | 2.20 | .... | .11 |
| 1 1/4 | 8 | 3.10 | .... | 11 | 3.70 | .... | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

Inside diameter of eyes same as on above screw eyes.

Note—Larger sizes and extra lengths of both regular and
small eye bolts furnished to order.



REGULAR EYE
TO RIVET
No. 6175

Galvanized. Drop
forged; hot gal-
vanized. Can be

furnished to order with smaller eye.

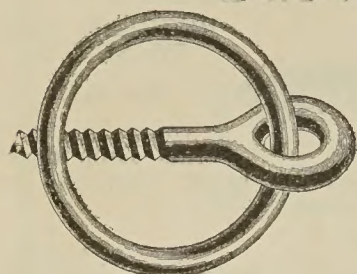
| Size, Inches | Length Under Shoulder, Inches | Inside Diam. of Eye, Inches | Galv. Each | * Additiona Length Inch, Galv., Ea. |
|-----------------|-------------------------------------|-----------------------------------|---------------|---|
| 1/4 | 4 | 3/8 | \$0.17 | \$0.03 |
| 5/16 | 4 1/4 | 7/16 | .21 | .04 |
| 3/8 | 4 1/2 | 1/2 | .25 | .04 |
| 1/2 | 6 | 5/8 | .35 | .05 |
| 5/8 | 6 | 7/8 | .55 | .06 |
| 3/4 | 6 1/2 | 1 1/16 | .95 | .08 |
| 7/8 | 8 | 1 1/4 | 1.50 | .09 |
| 1 | 9 | 1 7/16 | 1.70 | .11 |
| 1 1/4 | 11 | 1 3/4 | 3.10 | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

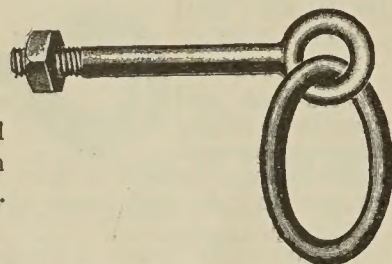
Note—Larger sizes and extra lengths of both regular and
small eye furnished to order.

This catalog has been compiled with a view to illustrating
only those items in our line which are commonly called for
by the hardware and marine supply trade.

RING BOLTS

TO SCREW
No. 6187Galvanized drop. forged
welded ring, hot galvanized
finish.

| Size, Inches | Length Under Eye, Inches | Inside Diam. of Ring, Inches | Galvanized, Each | *Additional Length Inch, Galv., Each |
|-----------------|--------------------------------|------------------------------------|---------------------|--|
| 1/4 | 2 | 1 3/4 | \$0.25 | \$0.03 |
| 5/16 | 2 1/4 | 2 | .30 | .04 |
| 3/8 | 2 1/2 | 2 | .35 | .04 |
| 1/2 | 3 1/4 | 2 1/2 | .45 | .05 |
| 5/8 | 4 | 2 3/4 | .75 | .06 |
| 3/4 | 4 1/2 | 3 | 1.15 | .08 |
| 7/8 | 5 | 3 1/4 | 1.75 | .09 |
| 1 | 6 | 3 3/4 | 2.60 | .11 |

WITH NUT
No. 6189Drop forged; welded
ring, hot galvanized; with
hot pressed, hexagon nut.

| Regular Length | | | | Extra Long | | |
|-----------------|--------------------------------|------------------------------------|---------------------|--------------------------------|----------------|--|
| Size, Inches | Length Under Eye, Inches | Inside Diam. of Ring, Inches | Galvanized, Each | Length Under Eye, Inches | Galv., Each | *Additional Length Inch, Galv., Each |
| 1/4 | 2 | 1 3/4 | \$0.35 | 4 | \$0.38 | \$0.03 |
| 5/16 | 2 1/4 | 2 | .38 | 4 1/4 | .43 | .04 |
| 3/8 | 2 1/2 | 2 | .45 | 4 1/2 | .50 | .04 |
| 1/2 | 3 1/4 | 2 1/2 | .60 | 6 | .65 | .05 |
| 5/8 | 4 | 2 3/4 | .85 | 6 | .95 | .06 |
| 3/4 | 4 1/2 | 3 | 1.35 | 6 1/2 | 1.50 | .08 |
| 7/8 | 5 | 3 1/4 | 2.00 | 8 | 2.20 | .09 |
| 1 | 6 | 3 3/4 | 2.90 | 9 | 3.10 | .11 |
| 1 1/4 | 8 | 5 | 5.75 | 11 | 6.25 | .19 |

TO RIVET
No. 6185Wrought iron;
drop forged;
welded ring; hot
galvanized. Eye
bolt end slightly
tapered.

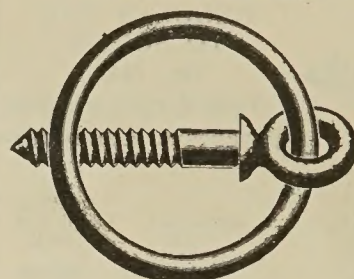
| Size, Inches | Length Under Eye, Inches | Inside Diam. of Ring, Inches | Galv., Each | *Additional Length Inch, Galv., Each |
|-----------------|--------------------------------|------------------------------------|----------------|--|
| 1/4 | 4 | 1 3/4 | \$0.30 | \$0.03 |
| 5/16 | 4 1/4 | 2 | .35 | .04 |
| 3/8 | 4 1/2 | 2 | .40 | .04 |
| 1/2 | 6 | 2 1/2 | .55 | .05 |
| 5/8 | 6 | 2 3/4 | .75 | .06 |
| 3/4 | 6 1/2 | 3 | 1.25 | .08 |
| 7/8 | 8 | 3 1/4 | 1.85 | .09 |
| 1 | 9 | 3 3/4 | 2.70 | .11 |
| 1 1/4 | 11 | 5 | 5.50 | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

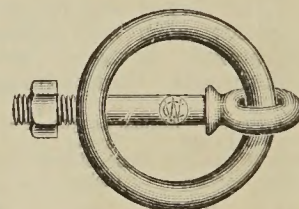
Note—Larger sizes or special lengths furnished to order.

Locks and Latches for Doors and Hatches.

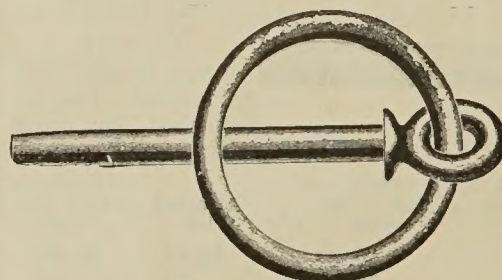
SHOULDER RING BOLTS

TO SCREW
No. 6193Drop forged; shoulder eye
bolt with welded ring hot
galvanized.

| Size, Inches | Length Under Eye, Inches | Inside Diam. of Ring, Inches | Galvanized, Each | *Additional Length Inch, Galv., Each |
|-----------------|--------------------------------|------------------------------------|---------------------|--|
| 1/4 | 2 | 1 3/4 | \$0.30 | \$0.03 |
| 5/16 | 2 1/4 | 2 | .40 | .04 |
| 3/8 | 2 1/2 | 2 | .45 | .04 |
| 1/2 | 3 1/4 | 2 1/2 | .60 | .05 |
| 5/8 | 4 | 2 3/4 | .85 | .06 |
| 3/4 | 4 1/2 | 3 | 1.35 | .08 |
| 7/8 | 5 | 3 1/4 | 2.00 | .09 |
| 1 | 6 | 3 3/4 | 3.00 | .11 |
| 1 1/4 | 8 | 5 | 6.00 | .19 |

WITH NUT
No. 6195Drop forged; welded
ring; hot galvanized;
hot pressed, galvanized,
hexagon nut.

| Regular Length | | | | Extra Long | | |
|-----------------|--------------------------------|------------------------------------|---------------------|--------------------------------|----------------|--|
| Size, Inches | Length Under Eye, Inches | Inside Diam. of Ring, Inches | Galvanized, Each | Length Under Eye, Inches | Galv., Each | *Additional Length Inch, Galv., Each |
| 1/4 | 2 | 1 3/4 | \$0.38 | 4 | \$0.40 | \$0.03 |
| 5/16 | 2 1/4 | 2 | .45 | 4 1/4 | .50 | .04 |
| 3/8 | 2 1/2 | 2 | .55 | 4 1/2 | .60 | .04 |
| 1/2 | 3 1/4 | 2 1/2 | .70 | 6 | .75 | .05 |
| 5/8 | 4 | 2 3/4 | .95 | 6 | 1.05 | .06 |
| 3/4 | 4 1/2 | 3 | 1.50 | 6 1/2 | 1.65 | .08 |
| 7/8 | 5 | 3 1/4 | 2.20 | 8 | 2.40 | .09 |
| 1 | 6 | 3 3/4 | 3.10 | 9 | 3.40 | .11 |
| 1 1/4 | 8 | 5 | 6.25 | 11 | 6.75 | .19 |

TO RIVET
No. 6191Drop forged;
welded ring; hot
galvanized. Eye
bolt end slightly
tapered.

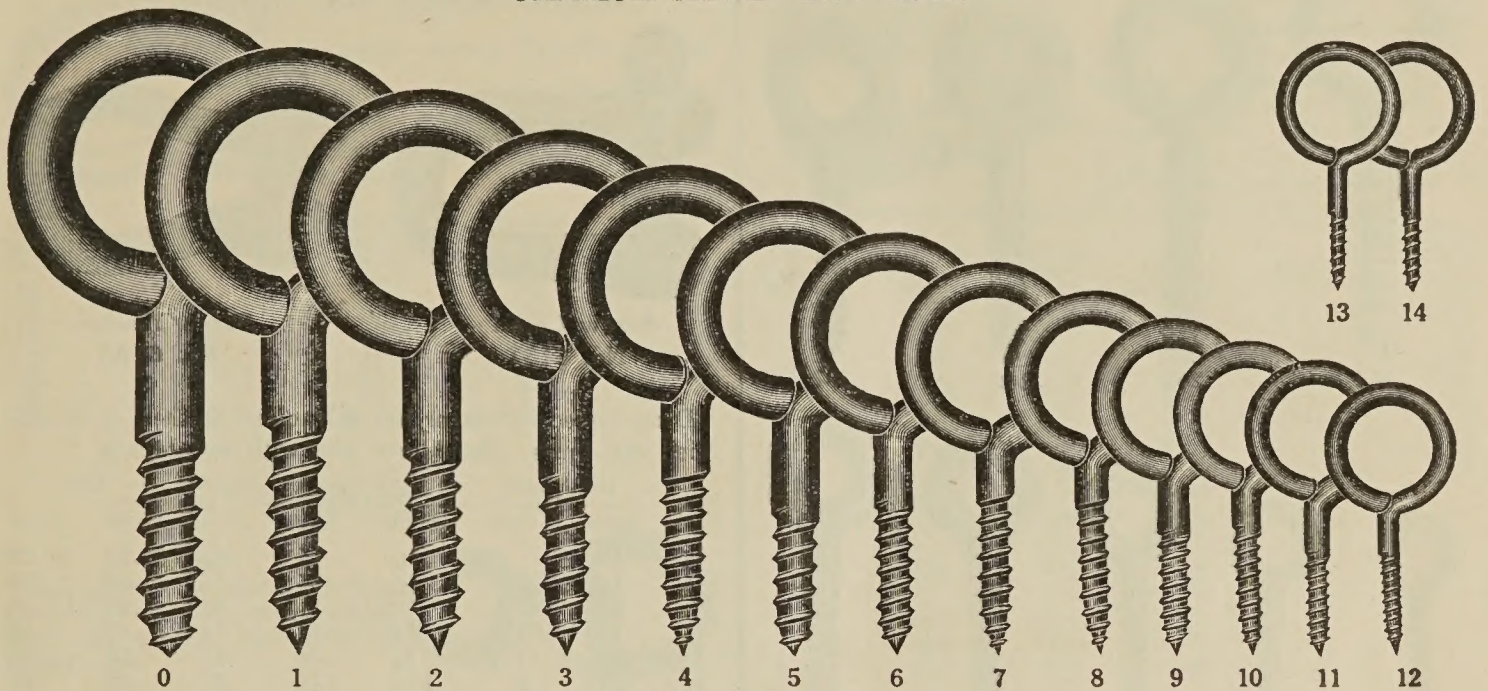
| Size, Inches | Length Under Eye, Inches | Inside Diam. of Ring, Inches | Galvanized, Each | *Additional Length Inch, Galv., Each |
|-----------------|--------------------------------|------------------------------------|---------------------|--|
| 1/4 | 4 | 1 3/4 | \$0.33 | \$0.03 |
| 5/16 | 4 1/4 | 2 | .40 | .04 |
| 3/8 | 4 1/2 | 2 | .50 | .04 |
| 1/2 | 6 | 2 1/2 | .65 | .05 |
| 5/8 | 6 | 2 3/4 | .85 | .06 |
| 3/4 | 6 1/2 | 3 | 1.35 | .08 |
| 7/8 | 8 | 3 1/4 | 2.00 | .09 |
| 1 | 9 | 3 3/4 | 3.00 | .11 |
| 1 1/4 | 11 | 5 | 6.00 | .19 |

*For Each Additional Inch or Fraction Add to List. Plus
\$1.00 Net per Diameter.

Note—Larger sizes or special lengths furnished to order.

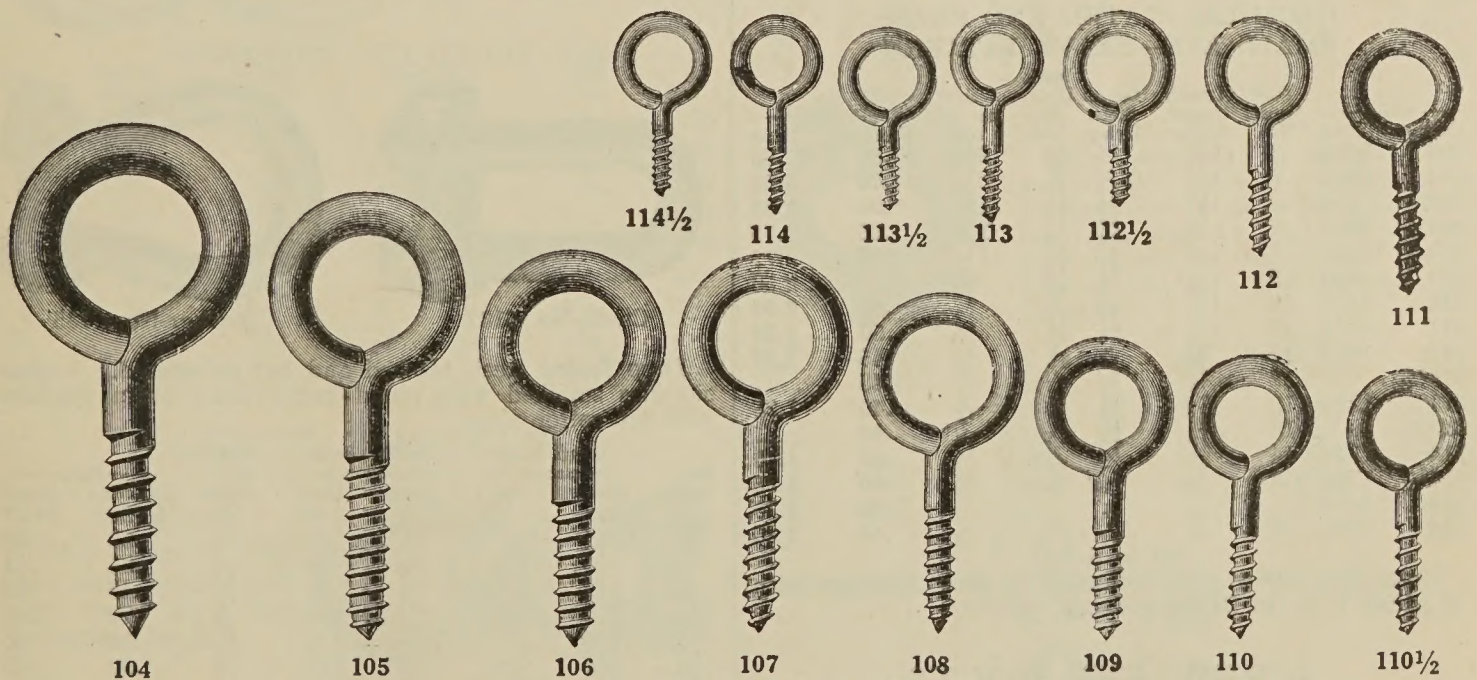
WIRE SCREW EYES

CADMIUM PLATED AND BRASS



LARGE EYE—LIGHT WEIGHT

| Nos. | | Length Overall, Inches | Length of Stem, Inches | Inside Diam. of Eye, Inch | Per Gross | | Nos. | Length Overall, Inches | Length of Stem, Inches | Inside Diam. of Eye, Inch | Per Gross | |
|---------|-------|------------------------------|------------------------------|------------------------------------|-----------|---------|---------|------------------------------|------------------------------|------------------------------------|-----------|--------|
| Cadmium | Brass | | | | Cadmium | Brass | Cadmium | Brass | | | Cadmium | Brass |
| 0 | 1000 | 2 7/8 | 1 9/16 | 1 1/8 | \$3.60 | \$20.00 | 8 | 1 5/8 | 1 1/8 | 1 1/8 | \$0.75 | \$2.75 |
| 1 | 1001 | 2 13/16 | 1 7/8 | 1 1/8 | 3.00 | 15.00 | 9 | 1 1/2 | 3/4 | 7/8 | .65 | 2.50 |
| 2 | .... | 2 5/8 | 1 5/8 | 1 1/8 | 2.50 | 12.50 | 10 | 1 3/8 | 1 1/8 | 1 1/8 | .55 | 2.00 |
| 3 | 1003 | 2 1/2 | 1 7/8 | 1 1/8 | 2.00 | 10.00 | 11 | 1 1/4 | 5/8 | 1 1/8 | .50 | 1.50 |
| 4 | 1004 | 2 1/8 | 1 1/2 | 1 1/8 | 1.60 | 7.50 | 12 | 1 3/4 | 3/4 | 3/8 | .45 | 1.25 |
| 5 | 1005 | 2 1/8 | 1 1/2 | 1 1/8 | 1.30 | 6.50 | 13 | 1 1/8 | 1 1/8 | 1 1/8 | .40 | 1.25 |
| 6 | 1006 | 1 13/16 | 1 1/4 | 1 1/8 | 1.00 | 5.25 | 14 | 1 1/8 | 1 1/2 | 1 1/8 | .40 | 1.25 |
| 7 | 1007 | 1 13/16 | 1 1/4 | 1 1/8 | .85 | 3.75 | .. | .... | ... | .. | .... | .... |



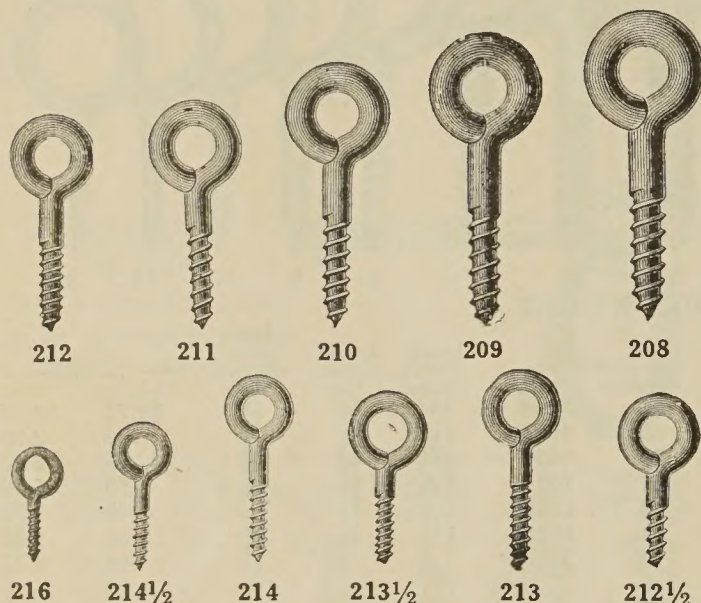
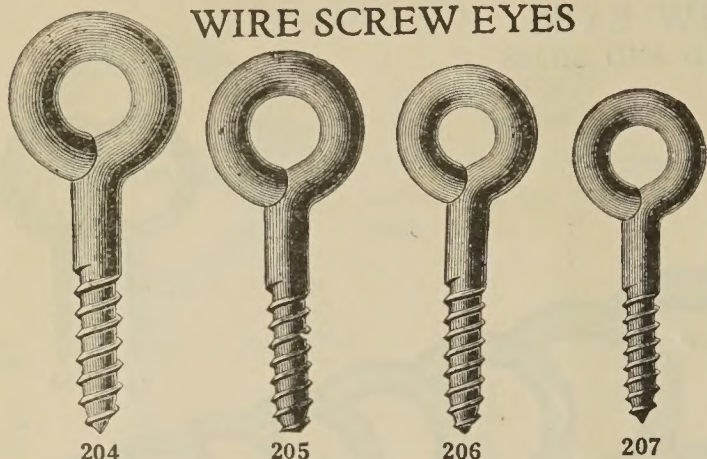
MEDIUM EYE—MEDIUM WEIGHT

| Nos. | | Wire Gauge, Nos. | Length Overall, Inches | Length of Stem, Inches | Inside Diam. Eye, Inch | Weight per Box, Lbs. | Per Gross | | Nos. | Wire Gauge, Nos. | Length Overall, Inches | Length of Stem, Inches | Inside Diam. Eye, Inch | Weight per Box, Lb. | Per Gross | |
|---------|-------|------------------------|------------------------------|------------------------------|---------------------------------|----------------------------|-----------|--------|---------|------------------------|------------------------------|------------------------------|---------------------------------|------------------------------|-----------|--------|
| Cadmium | Brass | | | | | | Cadmium | Brass | Cadmium | Brass | | | | | Cadmium | Brass |
| 104 | 1104 | 4 | 2 1/8 | 1 1/8 | 3 1/8 | 3 5/8 | \$1.60 | \$7.50 | 111 | .... | 11 | 1 1/8 | 5/8 | 1 1/8 | \$0.50 | \$.... |
| 105 | 1105 | 5 | 1 13/16 | 1 1/4 | 3 1/8 | 2 3/4 | 1.30 | 6.50 | 112 | 1112 | 12 | 1 1/8 | 3/4 | 1 1/8 | .45 | 1.25 |
| 106 | 1106 | 6 | 1 13/16 | 1 1/4 | 3 1/8 | 2 1/4 | 1.00 | 5.25 | 112 1/2 | .... | 12 | 1 1/8 | 3/8 | 1 1/8 | .45 | .... |
| 107 | 1107 | 7 | 1 11/16 | 1 1/4 | 3 1/8 | 1 1/2 | .85 | 3.75 | 113 | 1113 | 13 | 1 | 3/8 | 1 1/8 | .40 | 1.25 |
| 108 | 1108 | 8 | 1 9/16 | 1 1/4 | 3 1/8 | 1 3/8 | .75 | 2.75 | 113 1/2 | .... | 13 | 1 1/8 | 3/8 | 1 1/8 | .40 | .... |
| 109 | 1109 | 9 | 1 7/8 | 3/4 | 3 1/8 | 1 1/8 | .65 | 2.50 | 114 | 1114 | 14 | 1 1/8 | 1/2 | 1 1/8 | .40 | 1.25 |
| 110 | 1110 | 10 | 1 13/16 | 1 1/4 | 3 1/8 | 3/4 | .55 | 2.00 | 114 1/2 | 1114 1/2 | 14 | 1 1/8 | 3/8 | 1 1/8 | .40 | .... |
| 110 1/2 | .... | 10 | 1 13/16 | 1 1/4 | 3 1/8 | 3/4 | .55 | .... | 115 | 1115 | .. | .. | .. | .. | .40 | .... |

Note—The screw eyes indicated by their numbers with 1/2 added, i.e., No. 110 1/2 are short shanks.

144 in a Box

WIRE SCREW EYES

CADMIUM PLATED AND BRASS
SMALL EYE—HEAVY PATTERN

| Nos. | Wire Gauge, Nos. | Length Overall, Inches | Length Stem, Inches | Inside Diam. Eye, Inch | Weight per Box Lbs. | Per Gross | |
|---------|------------------|------------------------|---------------------|------------------------|---------------------|-----------|--------|
| | | | | | | Cadm. | Brass |
| 204 | 1204 | 4 | 1 1/8 | 1 1/8 | 2 7/8 | \$1.60 | \$7.50 |
| 205 | 1205 | 5 | 1 3/4 | 1 1/8 | 2 1/8 | 1.30 | 6.50 |
| 206 | 1206 | 6 | 1 5/8 | 1 1/8 | 1 5/8 | 1.00 | 5.25 |
| 207 | 1207 | 7 | 1 1/2 | 1 1/8 | 1 1/8 | .85 | 3.75 |
| 208 | 1208 | 8 | 1 3/8 | 1 1/8 | 1 1/8 | .75 | 2.75 |
| 209 | 1209 | 9 | 1 1/4 | 1 1/8 | 7/8 | .65 | 2.50 |
| 210 | 1210 | 10 | 1 3/8 | 1 1/8 | 3/4 | .55 | 2.00 |
| 211 | 1211 | 11 | 1 1/8 | 1 1/8 | 5/8 | .50 | 1.50 |
| 212 | 1212 | 12 | 1 1/8 | 1 1/8 | 3/8 | .45 | 1.25 |
| 212 1/2 | .... | 12 | 3/4 | 3/8 | 3/8 | .45 | .... |
| 213 | 1213 | 13 | 7/8 | 1 1/8 | 1 1/8 | .40 | 1.25 |
| 213 1/2 | .... | 13 | 1 1/8 | 1 1/8 | 1 1/8 | .40 | .... |
| 214 | 1214 | 14 | 1 1/8 | 1 1/2 | 1 1/8 | .40 | 1.25 |
| 214 1/2 | 1214 1/2 | 14 | 1 1/8 | 3/8 | 1 1/8 | .40 | 1.25 |
| 215 | 1215 | 15 | .. | .. | .. | .40 | 1.25 |
| 216 | 1216 | 16 | 1 1/8 | 1 1/8 | 1 1/8 | .40 | 1.25 |

144 in a Box

Note—The screw eyes indicated by their numbers with 1/2 added, i. e., No. 213 1/2, are short shanks.

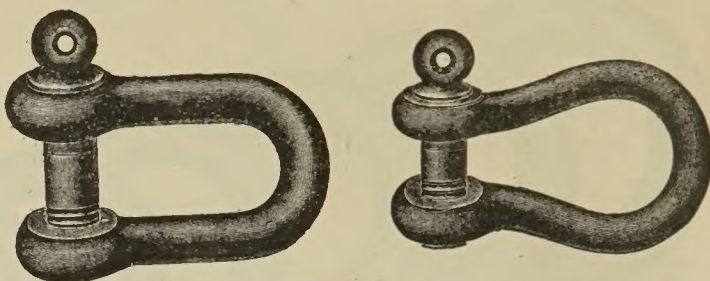
SCREW EYE BOLTS
CAST BRASS—WITH SHOULDERMEDIUM PATTERN
No. 6165

With shoulder; cast brass; dipped and polished; brass finish.

| Size, Nos. | Diam. of Shank, Inch | Diam. of Eye, Inch | Length Under Shoulder, Inches | Each | |
|------------|----------------------|--------------------|-------------------------------|--------|----------|
| | | | | Plain | Polished |
| 3 | 3/8 | 1 1/2 | 1 1/4 | \$0.10 | \$0.20 |
| 4 | 1/2 | 1 1/2 | 1 1/2 | .15 | .30 |
| 5 | 5/8 | 3/4 | 1 5/8 | .20 | .40 |
| 6 | 1 1/2 | 1 1/8 | 1 7/8 | .30 | .55 |

SHACKLES

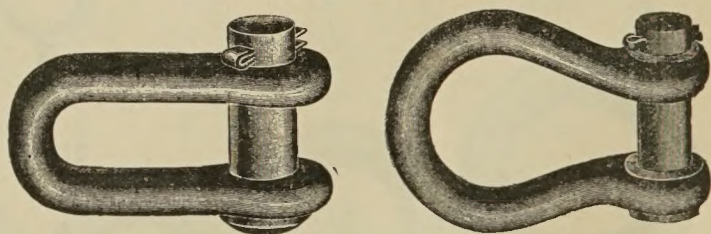
ROUND SCREW PIN—SHOULDERED

Screw Chain
No. 6131Screw Anchor
No. 6133

Drop forged; black or hot galvanized finishes, or in polished cast brass. Shouldered pins with cut threads.

| Size, Inches | Length Inside, Inches | | Width Between, Eyes, Inches | | Diameter of Pin, Inches | Each | |
|--------------|-----------------------|--------|-----------------------------|--------|-------------------------|------------|--------|
| | Anchor | Chain | Anchor | Chain | | Galvanized | Black |
| 1/4 | 1 | 1 3/16 | 7/16 | 7/16 | 5/16 | \$0.28 | \$0.25 |
| 5/16 | 1 1/4 | 1 | 9/16 | 9/16 | 3/8 | .30 | .28 |
| 3/8 | 1 1/2 | 1 3/16 | 1 1/16 | 1 1/16 | 7/16 | .35 | .33 |
| 7/16 | 1 3/4 | 1 3/8 | 3/4 | 3/4 | 1 1/2 | .45 | .40 |
| 1 1/2 | 2 | 1 5/8 | 7/8 | 7/8 | 5/8 | .50 | .45 |
| 5/8 | 2 1/2 | 2 | 1 1/8 | 1 1/8 | 3/4 | .80 | .70 |
| 3/4 | 2 3/4 | 2 3/8 | 1 5/16 | 1 5/16 | 7/8 | .90 | .75 |
| 7/8 | 3 1/4 | 2 3/4 | 1 1/2 | 1 1/2 | 1 | 1.40 | 1.10 |
| 1 | 3 1/2 | 3 1/8 | 1 5/8 | 1 5/8 | 1 1/8 | 1.80 | 1.45 |
| 1 1/8 | 4 1/8 | 3 3/8 | 1 5/8 | 1 5/8 | 1 1/4 | 2.60 | 2.10 |
| 1 1/4 | 4 1/4 | 3 1/2 | 2 | 2 | 1 3/8 | 3.20 | 2.60 |
| 1 3/8 | 5 | 4 1/8 | 2 3/8 | 2 1/8 | 1 1/2 | 4.40 | 3.60 |
| 1 1/2 | 5 | 4 7/8 | 2 1/2 | 2 3/8 | 1 5/8 | 5.25 | 4.20 |
| 1 3/4 | 7 | 5 1/2 | 3 | 2 3/4 | 1 7/8 | 10.00 | 8.00 |
| 2 | 8 1/4 | 6 3/4 | 3 1/2 | 2 7/8 | 2 1/8 | 15.00 | 12.00 |
| 2 1/4 | 8 3/4 | 7 1/4 | 3 7/8 | 3 7/8 | 2 1/2 | 40.00 | 34.00 |
| 2 1/2 | 10 | 8 1/4 | 4 1/8 | 4 1/8 | 2 3/4 | 49.00 | 43.00 |

ROUND PIN—COTTERED



Chain—No. 6137

Anchor—No. 6135

Drop forged steel, blacked and hot galvanized. Anchor shackles supplied with round cotter pins; chain shackles with flat cotter pins.

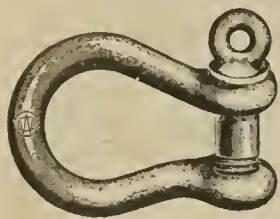
| Size, Inches | Length Inside, Inches | | Width Between, Eyes, Inches | | Diameter of Pin, Inches | Each | |
|--------------|-----------------------|-------|-----------------------------|--------|-------------------------|------------|--------|
| | Anchor | Chain | Anchor | Chain | | Galvanized | Japn'd |
| 1/4 | 1 | 1 1/8 | 7/16 | 7/16 | 5/16 | \$0.28 | \$0.25 |
| 5/16 | 1 1/4 | 1 | 9/16 | 9/16 | 3/8 | .30 | .28 |
| 3/8 | 1 1/2 | 1 1/8 | 1 1/16 | 1 1/16 | 7/16 | .35 | .33 |
| 7/16 | 1 3/4 | 1 3/8 | 3/4 | 3/4 | 1 1/2 | .45 | .40 |
| 1 1/2 | 2 | 1 5/8 | 7/8 | 7/8 | 5/8 | .50 | .45 |
| 5/8 | 2 1/2 | 2 | 1 1/8 | 1 1/8 | 3/4 | .80 | .70 |
| 3/4 | 2 3/4 | 2 3/8 | 1 1/8 | 1 1/8 | 7/8 | .90 | .75 |
| 7/8 | 3 1/4 | 2 3/4 | 1 1/2 | 1 1/2 | 1 | 1.40 | 1.10 |
| 1 | 3 1/2 | 3 1/8 | 1 5/8 | 1 5/8 | 1 1/8 | 1.80 | 1.45 |
| 1 1/8 | 4 1/8 | 3 3/8 | 1 5/8 | 1 5/8 | 1 1/4 | 2.60 | 2.10 |
| 1 1/4 | 4 1/4 | 3 1/2 | 2 | 2 | 1 3/8 | 3.20 | 2.60 |
| 1 3/8 | 5 | 4 1/8 | 2 3/8 | 2 1/8 | 1 1/2 | 4.40 | 3.60 |
| 1 1/2 | 5 | 4 7/8 | 2 1/2 | 2 3/8 | 1 5/8 | 5.25 | 4.20 |
| 1 3/4 | 7 | 5 1/2 | 3 | 2 3/4 | 1 7/8 | 10.00 | 8.00 |
| 2 | 8 | 6 3/4 | 3 1/2 | 2 7/8 | 2 1/8 | 15.00 | 12.00 |
| 2 1/4 | 8 3/4 | 7 1/4 | 3 7/8 | 3 7/8 | 2 1/2 | 40.00 | 34.00 |
| 2 1/2 | 10 | 8 1/4 | 4 1/8 | 4 1/8 | 2 3/4 | 49.00 | 43.00 |

Note—Government tolerances in width, plus and minus are as follows: size 1/4 to 1 1/8 inch inclusive, 3/32 inch; sizes 1/2 to 1 1/4 inch inclusive, 1/16 inch; 1 3/8 to 2 1/2 inches, 1/8 inch.

BRONZE SHACKLES

DROP FORGED

Anchor—Screw Pin—No. 6133A



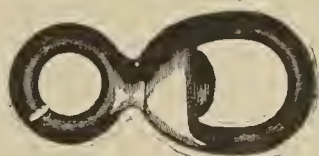
Equal steel in strength and take a polish that is superior to cast brass. Has shouldered pin with cut thread.

| Size, Inch | Length Inside, Inches | Width Between Eyes, Inches | Diameter of Pin, Inch | Each |
|------------|-----------------------|----------------------------|-----------------------|--------|
| 1/4 | 1 | 1/16 | 1/16 | \$0.70 |
| 5/16 | 1 1/4 | 1/16 | 3/8 | .85 |
| 3/8 | 1 1/2 | 1/16 | 1/2 | 1.00 |
| 7/16 | 1 3/4 | 3/4 | 1 1/2 | 1.35 |
| 1/2 | 2 | 7/8 | 5/8 | 1.75 |
| 5/8 | 2 1/2 | 1 1/8 | 3/4 | 2.90 |

SWIVELS

No. 6147

Hot galvanized malleable iron and plain cast brass. For use with light chains, flag hauls, fishing harness, etc.



| Size, Nos. | Length, Inches | Each Galvanized | Each Brass | Size, Nos. | Length, Inches | Each Galvanized | Each Brass |
|------------|----------------|-----------------|------------|------------|----------------|-----------------|------------|
| 1 | 1 1/2 | \$0.05 | \$0.15 | 4 | 3 1/4 | \$0.20 | .... |
| 2 | 2 | .09 | .20 | 5 | 3 1/2 | .25 | .... |
| 3 | 2 1/2 | .14 | .30 | 6 | 5 | .40 | .... |



No. 676

Drop forged and hot galvanized. For mooring chains, hoists, etc.

| Size, Inch | Length, Inches | Diameter of Eye, Inches | Size Bail, Inches | Weight Each, Lbs. | Each |
|------------|----------------|-------------------------|-------------------|-------------------|--------|
| 1/4 | 3 | 5/8 | 5/8x 7/8 | 1 1/8 | \$0.75 |
| 5/16 | 3 1/2 | 3/4 | 3/4x1 1/8 | 1 1/8 | .90 |
| 3/8 | 5 | 1 1/8 | 1 1/4x1 3/8 | 1 1/8 | 1.00 |
| 1/2 | 6 | 1 1/2 | 1 3/8x1 1/2 | 1 | 1.50 |
| 5/8 | 7 1/2 | 1 3/4 | 1 1/2x1 3/4 | 2 | 2.40 |
| 3/4 | 8 | 2 | 1 3/4x2 | 3 1/4 | 3.00 |
| 7/8 | 9 | 2 1/4 | 2 x2 3/8 | 5 1/2 | 3.60 |
| 1 | 10 1/2 | 2 1/2 | 2 3/4x3 1/4 | 8 1/8 | 4.80 |
| 1 1/4 | 13 1/2 | 2 7/8 | | 16 7/8 | 11.00 |

SWIVEL SHACKLES

No. 6760

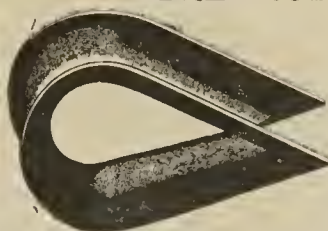
Drop forged; with bail and shackle, and with round pin. Hot galvanized finish.



| Size, Inches | Length, Inches | Width Between Jaws, Inches | Inside of Bail, Inches | Each |
|--------------|----------------|----------------------------|------------------------|--------|
| 1/4 | 3 1/4 | 1/2 | 1 1/8x1 1/4 | \$1.00 |
| 5/16 | 4 1/8 | 1/2 | 1 1/4x1 3/8 | 1.10 |
| 3/8 | 4 1/2 | 5/8 | 1 1/4x1 3/8 | 1.20 |
| 1/2 | 5 5/8 | 3/4 | 1 3/8x1 1/2 | 1.70 |
| 5/8 | 7 | 1 | 1 1/2x1 3/4 | 2.80 |
| 3/4 | 8 | 1 1/8 | 1 3/4x2 | 3.20 |
| 7/8 | 9 | 1 1/4 | 2 x2 3/8 | 4.00 |
| 1 | 11 | 1 1/2 | 2 1/4x2 3/4 | 6.00 |
| 1 1/4 | 13 1/4 | 1 7/8 | 2 3/8x3 | 12.00 |

WIRE ROPE THIMBLES

No. 6377



Wrought steel, hot galvanized, plain wrought brass, on drop forged brass.

V shaped score permits a closer splice. Also used with large sizes of manila rope requiring close splices. The drop

forged thimbles are equivalent to steel in strength.

| For Diam. Rope | Circumference of Rope, Inches | Extreme Length, Inches | Per 100 Galvanized | Wrought Brass | Each Drop Forged Brass |
|----------------|-------------------------------|------------------------|--------------------|---------------|------------------------|
| 1/16 | 1 1/2 | 1 5/8 | \$4.40 | \$.... | \$0.15 |
| 1/4 | 3/4 | 2 | 4.40 | .... | .15 |
| 5/16 | 1 | 2 1/8 | 5.25 | .... | .20 |
| 3/8 | 1 1/8 | 2 1/2 | 6.00 | .... | .25 |
| 7/16 | 1 1/4 | 2 5/8 | 7.00 | .... | .30 |
| 1/2 | 1 1/2 | 3 | 8.00 | .... | .35 |
| 5/8 | 2 | 3 5/8 | 11.00 | .... | .55 |
| 3/4 | 2 1/4 | 3 7/8 | 13.00 | .... | .... |
| 7/8 | 2 3/4 | 4 1/2 | 16.00 | .... | .... |
| 1 | 3 | 4 7/8 | 21.00 | .... | .... |
| 1 1/8 | 3 1/2 | 5 1/8 | 38.00 | .... | .... |
| 1 1/4 | 4 | 5 5/8 | 44.00 | .... | .... |
| 1 1/2 | 4 1/2 | 6 7/8 | 120.00 | .... | .... |
| 1 3/4 | 5 1/2 | 7 1/4 | 160.00 | .... | .... |
| 2 | 6 1/4 | 8 1/4 | 200.00 | .... | .... |

SAIL THIMBLES

No. 6373

One piece malleable iron; hot galvanized; for wire or manilla rope. Diameter is the outside measurement from edge to edge.



| For Diam. Rope | Outside Diameter, Inches | Per Dozen | For Diam. Rope | Outside Diameter, Inches | Per Dozen |
|----------------|--------------------------|-----------|----------------|--------------------------|-----------|
| 1/4 | 3/4 | \$0.45 | 5/8 | 2 | \$1.50 |
| 5/16 | 1 | .60 | 1 1/8 | 2 1/4 | 1.70 |
| 3/8 | 1 1/4 | .80 | 3/4 | 2 1/2 | 1.90 |
| 7/16 | 1 1/2 | 1.00 | 1 3/16 | 2 3/4 | 2.10 |
| 1/2 | 1 3/4 | 1.25 | 7/8 | 3 | 2.60 |

OPEN

No. 6375

Round wrought rope thimbles; hot galvanized. Outside diameter is measurement is across hole in thimble from edge to edge. The score and the hole in the thimble usually equally one-half the diameter of the thimble.



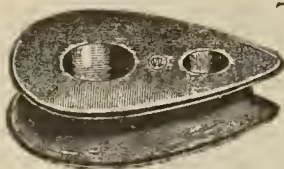
| For Diam. Rope | Outside Diameter, Inches | Per 100 | For Diam. Rope | Outside Diameter, Inches | Per 100 |
|----------------|--------------------------|---------|----------------|--------------------------|---------|
| 3/8 | 7/8 | \$5.00 | 1 | 2 1/4 | \$18.50 |
| 7/16 | 1 | 5.50 | 1 1/8 | 2 1/2 | 19.50 |
| 1/2 | 1 1/4 | 6.25 | 1 1/4 | 2 3/4 | 20.00 |
| 5/8 | 1 1/2 | 6.75 | 1 3/8 | 3 | 24.50 |
| 3/4 | 1 3/4 | 9.50 | 1 1/2 | 3 1/2 | 50.00 |
| 7/8 | 2 | 10.50 | .... | .... | .... |

YACHT WIRE ROPE THIMBLES GALVANIZED



Fig. 325

| For Diam. Rope | Width Inside, Inches | Length Overall, Inches | Weight per 100 Lbs. | Each |
|----------------|----------------------|------------------------|---------------------|--------|
| 1/8 | 3/8 | 1 1/8 | 1 1/4 | \$0.05 |
| 3/16 | 3/8 | 1 3/16 | 1 1/2 | .07 |
| 1/4 | 3/8 | 1 3/8 | 2 1/2 | .07 |
| 5/16 | 1/2 | 1 3/4 | 5 | .08 |
| 3/8 | 1 1/16 | 1 7/8 | 6 1/4 | .09 |



THIMBLES

SOLID
No. 321

Cast iron; hot galvanized. Used chiefly with wire shrouds and stays.

| For Served Wire Rope, Inches | Length, Inches | Size Large Hole, Inches | Weight Each in Lbs. | Each |
|------------------------------|----------------|-------------------------|---------------------|--------|
| 3/8 | 3 | 9/16 | 1 1/2 | \$0.35 |
| 7/16 | 3 5/8 | 1 1/16 | 3/4 | .38 |
| 1/2 | 3 11/16 | 3/4 | 1 | .40 |
| 5/8 | 4 5/16 | 1 | 1 1/2 | .50 |
| 3/4 | 4 9/16 | 1 1/8 | 1 3/4 | .55 |
| 7/8 | 5 1/8 | 1 3/8 | 2 1/4 | .70 |
| 1 | 6 1/16 | 1 3/8 | 3 5/8 | 1.25 |
| 1 1/4 | 7 1/4 | 1 5/8 | 5 1/4 | 1.70 |
| 1 3/8 | 7 7/16 | 1 7/8 | 6 1/2 | 2.40 |

WIRE ROPE SOCKETS

CLOSED TYPE
No. 340

Drop forged, weldless; for use with steel or iron rope.



| Diam. Rope, Inches | Extreme Length, Inches | Takes Pin, Inches | Length of Basket, Inches | Weight Each, Lbs. | Each |
|--------------------|------------------------|-------------------|--------------------------|-------------------|--------|
| 1/4 | 3 3/4 | 7/8 | 1 1/4 | 0.45 | \$0.70 |
| 5/16 | 3 3/4 | 7/8 | 1 1/4 | 0.45 | .75 |
| 3/8 | 4 7/8 | 1 | 2 1/4 | 0.82 | .85 |
| 7/8 | 4 7/8 | 1 | 2 1/4 | 0.82 | .90 |
| 1/2 | 5 5/8 | 1 1/8 | 2 3/8 | 1.2 | 1.15 |
| 5/8 | 5 5/8 | 1 1/8 | 2 3/8 | 1.2 | 1.25 |
| 3/4 | 6 1/2 | 1 3/8 | 3 | 2.15 | 1.55 |
| 7/8 | 7 3/4 | 1 3/4 | 3 1/2 | 3.6 | 2.10 |
| 1 | 9 1/4 | 1 7/8 | 4 3/8 | 5.5 | 2.90 |
| 1 1/8 | 10 5/8 | 2 1/8 | 4 3/4 | 8.5 | 4.00 |

Larger Sizes Furnished—Prices on Application



OPEN TYPE WITH PIN
No. 341

Drop forged, weldless; for use with steel or iron rope.

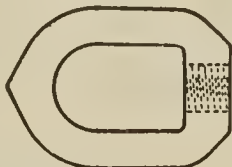
| Diam. Rope, Inches | Extreme Length, Inches | Opening Between Jaws, Inches | Length of Basket, Inches | Diameter of Pin, Inches | Weight Each, Lbs. | Each |
|--------------------|------------------------|------------------------------|--------------------------|-------------------------|-------------------|--------|
| 1/4 | 3 1/2 | 1 1/8 | 1 3/4 | 5/8 | 0.66 | \$1.00 |
| 5/16 | 3 1/2 | 1 1/8 | 1 3/4 | 5/8 | 0.66 | 1.05 |
| 3/8 | 4 3/4 | 1 1/8 | 2 3/8 | 3/4 | 1.2 | 1.40 |
| 7/8 | 4 3/4 | 1 1/8 | 2 3/8 | 3/4 | 1.2 | 1.45 |
| 1/2 | 5 5/8 | 1 1/8 | 2 1/2 | 7/8 | 1.9 | 1.85 |
| 5/8 | 5 5/8 | 1 1/8 | 2 1/2 | 7/8 | 1.9 | 1.95 |
| 3/4 | 6 1/8 | 1 1/4 | 2 7/8 | 1 | 3. | 2.40 |
| 7/8 | 7 1/2 | 1 1/2 | 3 1/2 | 1 1/8 | 4.8 | 3.10 |
| 1 | 8 1/8 | 1 5/8 | 4 1/4 | 1 3/8 | 8. | 3.90 |
| 1 1/8 | 10 | 1 7/8 | 4 5/8 | 1 5/8 | 12.2 | 5.25 |

Larger Sizes Furnished—Prices on Application

WELDLESS EYE NUTS

DROP FORGED

Hot galvanized and threaded with U.S.S. threads. Used with eye bolts or any place where a loop eye is necessary.



| Tapped for Bolt, Inches | Diameter Stock, Inches | Inside Diam. Eye, Inches | Depth Thread, Inches | Weight per 100 Lbs. | Each |
|-------------------------|------------------------|--------------------------|----------------------|---------------------|--------|
| 1/4 | 1/4 | 3/4x 7/8 | 3/8 | 6 3/8 | \$0.40 |
| 5/16 | 5/16 | 3/4x 7/8 | 3/8 | 6 3/8 | .40 |
| 3/8 | 3/8 | 15/16x1 1/8 | 7/16 | 12 1/2 | .50 |
| 7/16 | 7/16 | 15/16x1 1/8 | 7/16 | 12 1/2 | .50 |
| 1/2 | 1/2 | 1 1/8x1 1/16 | 9/16 | 25 | .60 |
| 5/8 | 5/8 | 1 1/2x1 3/4 | 3/4 | 56 | .80 |
| 3/4 | 3/4 | 1 5/8x2 3/8 | 13/16 | 125 | 1.00 |
| 7/8 | 7/8 | 1 7/8x2 3/4 | 1 | 200 | 1.20 |
| 1 | 1 | 2 1/8x3 1/8 | 1 1/8 | 303 | 1.60 |

Larger Sizes Furnished—Prices on Application

RIGGING TURNBUCKLES



With Check Nuts—No. 318

Forged eyes, hooks and shackles; hot galvanized. Made especially for ships rigging purposes with ends fitted with check nuts. Furnished with shackle and eye, solid thimble and with loose shackle. Width of loose shackle can be made to fit any chain plate.

| Diameter Thread, Inches | Length of Pipe, Inches | Width of Loose Shackle, Inches | For Served Wire Rope, Inches | Each |
|-------------------------|------------------------|--------------------------------|------------------------------|--------|
| 3/4 | 12 | 2 | 9/16 | \$6.75 |
| 7/8 | 13 | 2 1/4 | 5/8 | 8.00 |
| 1 | 15 | 2 1/2 | 3/4 | 11.00 |
| 1 1/4 | 16 | 3 | 1 | 18.50 |
| 1 1/2 | 18 | 3 1/2 | 1 1/8 | 26.00 |
| 1 3/4 | 21 | 4 | 1 1/4 | 36.00 |
| 2 | 24 | 4 | 1 1/2 | 67.00 |
| 2 1/4 | 24 | 4 1/4 | 1 5/8 | 91.00 |

DROP FORGED BRONZE TURNBUCKLES

OPEN PATTERN



No. 3160—For Rigging

Drop forged from solid bronze; equal in strength to corresponding sizes of steel turnbuckles. Threaded S.A.E. instead of U.S.S. Can be furnished with oval shaped eye in one end and narrow shaped shackle jaw in the other, or with large opening jaw in one end and narrow opening jaw in the other.

| Size, Between Heads, Inch | Length Body, Inches | Opening Between Jaws, Inch—Narrow Jaw Large Jaw, | Inside Width Eye, Inch | Plain, Each | Polished, Each |
|---------------------------|---------------------|--|------------------------|-------------|----------------|
| 5/16 | 3 5/16 | 3/16 17/64 | 17/32 | \$2.75 | \$3.25 |
| 3/8 | 3 5/8 | 15/64 11/32 | 5/8 | 3.25 | 3.75 |
| 7/16 | 3 15/16 | 17/64 25/64 | 21/32 | 3.75 | 4.50 |
| 1/2 | 4 1/4 | 5/16 19/32 | 23/32 | 4.75 | 5.50 |
| 5/8 | 4 7/8 | 3/8 9/16 | 1 | 5.50 | 6.50 |

MANGANESE BRONZE TURNBUCKLES

SLOTTED PIPE PATTERN—POLISHED



No. 316—For Yacht Rigging

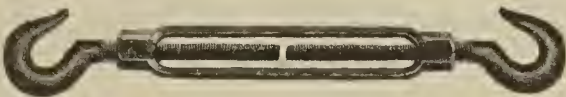
Cast manganese bronze, highly polished for fine yacht use. Shackle and eye ends are drilled for cotter pins to prevent turning when in use. Threads cut S.A.E. standard.

| Diam. Inches | Length Extended, Inches | Inside Diam of Eye, Inches | Width Inside of Jaw, Inches | Weight Each in Lbs. | Eye and Jaw, Each | Jaw and Jaw, Each |
|--------------|-------------------------|----------------------------|-----------------------------|---------------------|-------------------|-------------------|
| 1/4 | 9 | 1/2 | 1/4 and 7/16 | 1/4 | \$2.75 | \$2.75 |
| 5/16 | 10 | 9/16 | 5/16 and 1/2 | 1/2 | 3.25 | 3.25 |
| 3/8 | 12 | 9/16 | 3/8 and 9/16 | 3/4 | 3.75 | 3.75 |
| 1/2 | 15 | 5/8 | 1/2 and 11/16 | 1 1/4 | 4.75 | 4.75 |
| 5/8 | 17 | 3/4 | 5/8 and 13/16 | 2 3/8 | 5.50 | 5.50 |
| 3/4 | 22 | 7/8 | 3/4 and 15/16 | 3 3/4 | 6.50 | 6.50 |

Also furnished with two Eyes at price of Eye and Jaw. In Eye and Jaw Turnbuckles the narrow Jaw ends are used; in a Jaw and Jaw Turnbuckle one narrow and one wide Jaw end is used. Threads cut S. A. E. Thread.

WELDLESS TURNBUCKLES

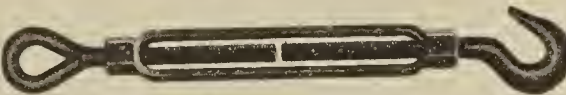
OPEN PATTERN—DROP FORGED



Hook and Hook—No. 6203



Eye and Eye—No. 6205



Hook and Eye—No. 6207

Drop forged steel; hot galvanized; with right and left hand threaded ends The hook and eye type is most generally used.

| Diameter Thread, Inches | Length Inside Body, Inches | Length Body, Inches | Length Overall, Closed, Inches | | Each |
|-------------------------------|----------------------------------|---------------------------|-----------------------------------|--------------|--------|
| | | | Eye and Eye | Hook and Eye | |
| 1/4 | 4 | 4 3/4 | 7 3/4 | 7 1/4 | \$0.50 |
| 5/16 | 4 1/2 | 5 1/16 | 8 3/4 | 8 3/4 | .55 |
| 3/8 | 6 | 7 1/8 | 11 3/8 | 11 | .72 |
| * 1/2 | 6 | 7 1/2 | 12 3/4 | 12 1/2 | .96 |
| 1/2 | 9 | 10 1/2 | 15 3/4 | 15 1/2 | 1.45 |
| 1 1/2 | 12 | 13 1/2 | 18 3/4 | 18 1/2 | 1.70 |
| * 5/8 | 6 | 7 7/8 | 14 3/4 | 14 1/8 | 1.15 |
| 5/8 | 9 | 10 7/8 | 17 3/4 | 17 1/8 | 1.75 |
| 5/8 | 12 | 13 7/8 | 20 3/4 | 20 1/8 | 2.10 |
| 5/8 | 18 | 19 7/8 | 26 3/4 | 25 1/8 | 2.60 |
| 3/4 | 6 | 8 1/4 | 16 1/4 | 15 3/4 | 1.50 |
| * 3/4 | 9 | 11 1/4 | 19 1/4 | 19 3/4 | 2.30 |
| 3/4 | 12 | 14 1/4 | 22 1/4 | 22 3/4 | 2.70 |
| 3/4 | 18 | 20 1/4 | 28 1/4 | 38 3/4 | 3.60 |
| 3/4 | 24 | 26 1/4 | 34 1/4 | 44 3/4 | 4.20 |
| * 7/8 | 12 | 14 5/8 | 21 1/2 | 21 3/8 | 3.40 |
| 7/8 | 18 | 20 5/8 | 29 1/2 | 29 3/8 | 4.30 |
| 7/8 | 24 | 26 5/8 | 35 1/2 | 35 3/8 | 5.25 |
| * 1 | 12 | 15 | 25 | 24 7/8 | 4.20 |
| 1 | 18 | 21 | 31 | 30 7/8 | 5.50 |
| 1 | 24 | 27 | 37 | 36 7/8 | 6.75 |
| 1 | 36 | 39 | 43 | 48 7/8 | 8.50 |
| * 1 1/8 | 12 | 15 3/8 | 27 | 26 5/8 | 5.25 |
| 1 1/8 | 18 | 21 3/8 | 33 | 32 5/8 | 6.75 |
| 1 1/8 | 24 | 27 3/8 | 39 | 38 5/8 | 8.25 |
| 1 1/8 | 36 | 39 3/8 | 51 | 50 5/8 | 10.50 |
| * 1 1/4 | 12 | 15 3/4 | 28 3/4 | 28 1/4 | 7.25 |
| 1 1/4 | 18 | 21 3/4 | 34 3/4 | 34 1/4 | 9.00 |
| 1 1/4 | 24 | 27 3/4 | 40 3/4 | 40 1/4 | 11.50 |
| 1 1/4 | 36 | 39 3/4 | 52 3/4 | 52 1/4 | 16.00 |
| 1 1/2 | 12 | 16 1/2 | 21 3/4 | 21 1/4 | 11.00 |
| 1 1/2 | 18 | 22 1/2 | 37 3/4 | 37 1/4 | 13.50 |
| 1 1/2 | 24 | 28 1/2 | 43 3/4 | 43 1/4 | 17.00 |
| 1 1/2 | 36 | 40 1/2 | 54 3/4 | 54 1/4 | 22.00 |
| 1 1/2 | 48 | 52 1/2 | 67 3/4 | 67 1/4 | 28.00 |
| 1 3/4 | 18 | 23 1/4 | 41 1/2 | 41 | 22.00 |
| 1 3/4 | 24 | 29 1/4 | 47 1/2 | 47 | 28.00 |
| 1 3/4 | 36 | 41 1/4 | 59 1/2 | 59 | 36.00 |
| 1 3/4 | 48 | 53 1/4 | 71 1/2 | 71 | 47.00 |
| 2 | 24 | 30 | 51 3/4 | 51 1/4 | 42.00 |
| 2 | 36 | 42 | 62 3/4 | 62 1/4 | 50.00 |
| 2 | 48 | 54 | 74 3/4 | 74 1/4 | 62.00 |
| 2 1/4 | 24 | 31 1/2 | 56 1/4 | 55 3/4 | 60.00 |
| 2 1/4 | 36 | 43 1/2 | 68 1/4 | 67 3/4 | 68.00 |
| 2 1/4 | 48 | 55 1/2 | 80 1/4 | 79 3/4 | 86.00 |
| 2 1/2 | 24 | 31 1/2 | 56 3/4 | 56 1/4 | 80.00 |
| 2 1/2 | 36 | 43 1/2 | 68 3/4 | 68 1/4 | 93.00 |
| 2 1/2 | 48 | 55 1/2 | 82 3/4 | 82 1/4 | 110.00 |

Note—If lock nuts are desired add 5 per cent to list prices for one lock nut and 10 per cent for two lock nuts. The length inside of turnbuckle body is the take-up.

*Standard marine stock sizes.

WELDLESS TURNBUCKLES

OPEN PATTERN—DROP FORGED



Eye and Shackle—No. 6209



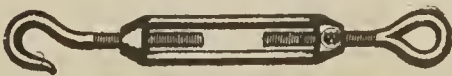
Shackle and Shackle—No. 6214

Drop forged; hot galvanized; with right and left hand thread. Standard commercial turnbuckles.

| Diam. Thread, Inches | Length Inside Body, Inches | Length Body, Inches | Closed, Inches, S. & S. | Width Between Jaws, Inches | Diameter Pin, Inches | Eye and Shackle, Each | Shackle and Shackle Each |
|----------------------------|-------------------------------------|---------------------------|-------------------------------|-------------------------------------|----------------------------|--------------------------------|-----------------------------------|
| | | | | | | | |
| 1/4 | 4 | 4 3/4 | 7 3/4 | 3/8 | 1/4 | \$0.58 | \$0.66 |
| 5/16 | 4 1/2 | 5 7/16 | 8 1/2 | 1/2 | 1/4 | .64 | .72 |
| 3/8 | 6 | 7 1/8 | 11 1/4 | 1/2 | 5/16 | .84 | .96 |
| * 1/2 | 6 | 7 1/2 | 12 3/8 | 5/8 | 7/16 | 1.10 | 1.25 |
| 1/2 | 9 | 10 1/2 | 15 3/8 | 5/8 | 7/16 | 1.70 | 1.90 |
| 1 1/2 | 12 | 13 1/2 | 18 3/8 | 5/8 | 7/16 | 2.00 | 2.30 |
| * 5/8 | 6 | 7 7/8 | 15 1/4 | 7/8 | 1/2 | 1.30 | 1.50 |
| 5/8 | 9 | 10 7/8 | 18 1/4 | 7/8 | 1/2 | 2.00 | 2.30 |
| 5/8 | 12 | 13 7/8 | 21 1/4 | 7/8 | 1/2 | 2.40 | 2.70 |
| 5/8 | 18 | 19 7/8 | 27 1/4 | 7/8 | 1/2 | 3.10 | 3.50 |
| 3/4 | 6 | 8 1/4 | 15 5/8 | 1 | 5/8 | 1.75 | 2.00 |
| * 3/4 | 9 | 11 1/4 | 15 5/8 | 1 | 5/8 | 2.70 | 3.00 |
| 3/4 | 12 | 14 1/4 | 22 5/8 | 1 | 5/8 | 3.10 | 3.50 |
| 3/4 | 18 | 20 1/4 | 38 5/8 | 1 | 5/8 | 4.20 | 4.70 |
| 3/4 | 24 | 26 1/4 | 44 5/8 | 1 | 5/8 | 4.90 | 5.50 |
| * 7/8 | 12 | 14 5/8 | 21 7/8 | 1 1/8 | 3/4 | 3.90 | 4.50 |
| 7/8 | 18 | 20 5/8 | 29 7/8 | 1 1/8 | 3/4 | 5.00 | 5.75 |
| 7/8 | 24 | 26 5/8 | 35 7/8 | 1 1/8 | 3/4 | 6.25 | 7.00 |
| 1 | 12 | 15 | 26 1/2 | 1 1/4 | 7/8 | 4.80 | 5.50 |
| 1 | 18 | 21 | 32 1/2 | 1 1/4 | 7/8 | 6.50 | 7.25 |
| 1 | 24 | 27 | 38 1/2 | 1 1/4 | 7/8 | 8.00 | 8.75 |
| 1 | 36 | 39 | 50 1/2 | 1 1/4 | 7/8 | 10.00 | 11.50 |
| * 1 1/8 | 12 | 15 3/8 | 26 7/8 | 1 5/8 | 1 | 6.00 | 6.75 |
| 1 1/8 | 18 | 21 3/8 | 32 7/8 | 1 5/8 | 1 | 8.00 | 8.75 |
| 1 1/8 | 24 | 27 3/8 | 38 7/8 | 1 5/8 | 1 | 9.50 | 10.50 |
| 1 1/8 | 36 | 39 3/8 | 50 7/8 | 1 5/8 | 1 | 12.00 | 13.50 |
| * 1 1/4 | 12 | 15 3/4 | 27 3/8 | 1 5/8 | 1 | 9.00 | 11.00 |
| 1 1/4 | 18 | 21 3/4 | 33 3/8 | 1 5/8 | 1 | 11.00 | 13.00 |
| 1 1/4 | 24 | 27 3/4 | 39 3/8 | 1 5/8 | 1 | 13.00 | 15.00 |
| 1 1/4 | 36 | 39 3/4 | 51 3/8 | 1 5/8 | 1 | 17.00 | 18.00 |
| 1 1/2 | 12 | 16 1/2 | 30 1/4 | 2 1/16 | 1 3/8 | 13.00 | 15.00 |
| 1 1/2 | 18 | 22 1/2 | 36 1/4 | 2 1/16 | 1 3/8 | 15.75 | 18.00 |
| 1 1/2 | 24 | 28 1/2 | 42 1/4 | 2 1/16 | 1 3/8 | 20.00 | 23.00 |
| 1 1/2 | 36 | 40 1/2 | 54 1/4 | 2 1/16 | 1 3/8 | 26.00 | 30.00 |
| 1 1/2 | 48 | 52 1/2 | 66 1/4 | 2 1/16 | 1 3/8 | 33.00 | 38.00 |
| 1 3/4 | 18 | 23 1/4 | 41 1/4 | 2 1/4 | 1 1/2 | 28.00 | 33.00 |
| 1 3/4 | 24 | 29 1/4 | 47 5/8 | 2 1/4 | 1 1/2 | 34.00 | 39.00 |
| 1 3/4 | 36 | 41 1/4 | 59 5/8 | 2 1/4 | 1 1/2 | 42.00 | 48.00 |
| 1 3/4 | 48 | 53 1/4 | 71 5/8 | 2 1/4 | 1 1/2 | 55.00 | 62.00 |
| 2 | 24 | 30 | 51 1/4 | 2 1/2 | 1 3/4 | 50.00 | 58.00 |
| 2 | 36 | 42 | 63 1/4 | 2 1/2 | 1 3/4 | 59.00 | 68.00 |
| 2 | 48 | 54 | 75 1/4 | 2 1/2 | 1 3/4 | 74.00 | 85.00 |
| 2 1/4 | 24 | 31 1/2 | 57 | 2 5/8 | 2 | 74.00 | 85.00 |
| 2 1/4 | 36 | 43 1/2 | 69 | 2 5/8 | 2 | 84.00 | 100.00 |
| 2 1/4 | 48 | 55 1/2 | 81 | 2 5/8 | 2 | 105.00 | 125.00 |

Note—If lock nuts are desired add 5 per cent to list prices for one lock nut and 10 per cent for two lock nuts. *These items stocked in quantity in our warehouse.

MALLEABLE IRON—OPEN PATTERN



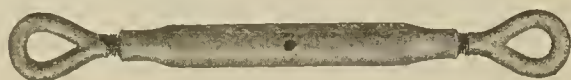
Hook and Eye

Furnished hook and hook, hook and eye and eye, Have left and right hand

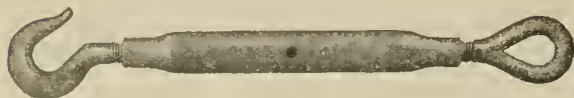
| Diameter Thread, Inches | Length Inside Body, Inches | Length Extended, Inches | Each |
|-------------------------------|----------------------------------|-------------------------------|--------|
| | | | |
| 1/4 | 4 | 11 1/4 | \$0.44 |
| 5/16 | 4 1/2 | 12 1/2 | .45 |
| 3/8 | 6 | 17 | .60 |

PIPE TURNBUCKLES

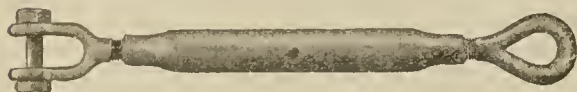
FORGED ENDS



Eye and Eye—No. 371



Hook and Eye—No. 372



Jaw and Eye—No. 377



Jaw and Jaw—No. 383

Forged eyes, hooks and shackles; wrought steel extra heavy pipe bodies; hot galvanized.

| Inches Diam | Length of Pipe, Inches | Weight per 100, Lbs. | Hook and Eye, Eye and Eye, Each | Jaw and Eye, Each | Jaw and Jaw, Each |
|-------------|------------------------|----------------------|---------------------------------|-------------------|-------------------|
| 1/4 | 5 1/2 | 50 | \$0.85 | \$0.95 | \$1.05 |
| 5/16 | 5 3/4 | 58 | 1.00 | 1.10 | 1.20 |
| 3/8 | 6 1/2 | 103 | 1.15 | 1.25 | 1.35 |
| 1/2 | 8 | 219 | 1.55 | 1.75 | 1.95 |
| 5/8 | 10 3/4 | 371 | 2.20 | 2.45 | 2.70 |
| 3/4 | 12 | 498 | 3.00 | 3.35 | 3.70 |
| 7/8 | 15 | 772 | 4.00 | 4.50 | 5.00 |
| 1 | 15 | 1056 | 5.00 | 5.60 | 6.20 |
| 1 1/4 | 16 | 1936 | 8.00 | 9.00 | 10.00 |
| 1 1/2 | 21 | 3201 | 15.00 | 16.50 | 18.00 |
| 1 3/4 | 21 | 4405 | 25.00 | 28.00 | 31.00 |
| 2 | 24 | 7289 | 40.00 | 43.00 | 47.00 |
| 2 1/4 | 24 | 10017 | 65.00 | 70.00 | 75.00 |
| 2 1/2 | 30 | 12000 | 80.00 | 90.00 | 100.00 |

Note—Hooks larger than 1 1/2 in. are hand forged.

For One Lock Nut Add 5% to List.

For Two Lock Nuts Add 10% to List.

For detailed dimensions see Page 7, weldless turnbuckles; all fittings are the same for corresponding sizes.

BRONZE TURNBUCKLES



No. 211—OPEN CENTER

Screws are made of specially treated Tobin bronze the strength of which compares favorably with that of steel and which is hardly affected by corrosion. Have S.A.E. threads. The smaller sizes are particularly adapted for use with aircraft wire. Upper jaw is suitable to take a wire rope thimble, and lower jaw will take chain plate.

| Size, Inch | For Wire Rope, Ins. | Length Closed, Ins. | Length Extended, Ins. | Strength, Lbs. | Each |
|------------|---------------------|---------------------|-----------------------|----------------|--------|
| 1/4 | * 1/8 | 7 1/2 | 11 1/2 | 2,300 | \$3.00 |
| 5/16 | * 3/32 | 8 1/4 | 12 1/4 | 3,600 | 3.25 |
| 3/8 | † 1/4 | 9 | 13 | 5,600 | 3.50 |
| 7/16 | † 3/8 | 9 3/4 | 13 3/4 | 7,500 | 4.00 |
| 1/2 | † 1/2 | 10 | 14 1/2 | 10,500 | 5.00 |
| 5/8 | 3/8 - 1 1/8 | 12 3/4 | 18 3/4 | 17,000 | 7.00 |
| 3/4 | 1/2 - 1 1/8 | 15 1/4 | 22 1/4 | 25,000 | 10.00 |
| 7/8 | 5/8 - 1 1/4 | 18 | 26 | 34,000 | 14.00 |
| 1 | 3/4 | 18 1/2 | 26 1/2 | 45,000 | 20.00 |

* Airplane † Plow Steel

WELDLESS TURNBUCKLES

STANDARD



With or Without Stub Ends

Right and left U. S. Standard Threads. One piece drop forging insuring great strength and reliability.

| Diam. of Ends, Inches | Black, Each— | | | | |
|-----------------------|--------------|--------------|-----------------------------|-----------------------------|------------------------------|
| | Length 4 | Length 4 1/2 | Length Clear Inside Body, 6 | Length Clear Inside Body, 9 | Length Clear Inside Body, 12 |
| 1/4 | \$0.36 | .... | .... | .... | .... |
| 5/16 | | \$0.38 | .... | .... | .... |
| 3/8 | | | \$0.45 | .... | .... |
| 1/2 | | | .50 | \$0.75 | \$0.88 |
| 5/8 | | | .60 | .90 | 1.05 |
| 3/4 | | | .75 | 1.13 | 1.31 |
| 7/8 | | | .90 | .... | 1.58 |
| 1 | | | 1.10 | .... | 1.93 |
| 1 1/8 | | | 1.40 | .... | 2.45 |
| 1 1/4 | | | 1.70 | .... | 2.98 |
| 1 3/8 | | | 2.10 | .... | .... |
| 1 1/2 | | | 2.50 | .... | 4.38 |
| 1 5/8 | | | 3.25 | .... | .... |
| 1 3/4 | | | 4.00 | .... | .... |
| 2 | | | 6.25 | .... | .... |
| 2 1/4 | | | 9.25 | .... | .... |
| 2 1/2 | | | 13.00 | .... | .... |

| | Length Clear Inside Body, Inches | | | |
|-------|----------------------------------|--------|--------|---------|
| | 18 | 24 | 36 | 48 |
| 5/8 | \$1.50 | .... | .... | .... |
| 3/4 | 1.88 | \$2.63 | .... | .... |
| 7/8 | 2.25 | 3.15 | .... | .... |
| 1 | 2.75 | 3.85 | \$4.40 | .... |
| 1 1/8 | 3.50 | 4.90 | 5.60 | .... |
| 1 1/4 | 4.25 | 5.95 | 6.80 | .... |
| 1 1/2 | 6.25 | 8.75 | 10.00 | \$15.00 |
| 1 3/4 | 10.00 | 14.00 | 16.00 | 24.00 |
| 2 | .... | 21.88 | 25.00 | 37.50 |
| 2 1/4 | .... | 32.38 | 37.00 | 55.50 |
| 2 1/2 | .... | 45.50 | 52.00 | 78.00 |

Note—Turnbuckles are furnished with six inch bodies unless otherwise specified. Hot galvanized finish furnished to special order.

HOOKS AND THIMBLES

No. 6129

FOR MANILA ROPE

Drop forged; hot galvanized; with round manila rope thimble. Diameter or size of stock is obtained from the bend of the hook.

Used on jib stays, hoists and sheets.



| Size, Inches | Length, Inches | Inside Diameter of Eye, Inches | Width Score of Thimble, Inches | Each | |
|--------------|----------------|--------------------------------|--------------------------------|--------|------------|
| | | | | Black | Galvanized |
| 1/4 | 2 1/8 | 1 1/8 | 1 1/8 | \$0.19 | \$0.20 |
| 5/16 | 2 5/8 | 1 1/4 | 1 1/4 | .21 | .22 |
| 3/8 | 2 3/4 | 1 1/2 | 1 1/2 | .23 | .24 |
| 1/2 | 3 1/2 | 1 3/4 | 1 3/4 | .25 | .28 |
| 5/8 | 5 1/4 | 1 7/8 | 1 7/8 | .35 | .40 |
| 3/4 | 5 3/8 | 2 | 2 | .43 | .50 |
| 7/8 | 6 1/2 | 2 1/8 | 2 1/8 | .80 | .90 |
| 1 | 7 | 2 1/4 | 2 1/4 | .85 | 1.10 |
| 1 1/8 | 7 1/2 | 2 1/2 | 2 1/2 | 1.05 | 1.30 |
| 1 1/4 | 8 1/2 | 2 3/4 | 2 3/4 | 1.30 | 1.60 |

Note—Black finish not regularly carried in stock.

HOOKS AND THIMBLES



No. 229

FOR WIRE ROPE

Drop forged; blacked and hot galvanized finishes; with wire rope thimble. Diameter or size of iron is obtained from largest part of the hooks in bend where hooks are closed. Used on fore stays, hoists, etc.

| Size, Inches | Length, Inches | Inside Diameter of Eye, Inches | Width Score of Thimble, Inches | Each | |
|-----------------|-------------------|--------------------------------------|--------------------------------------|--------|------------|
| | | | | Black | Galvanized |
| 1/4 | 2 1/8 | 1/8 | 1/8 | \$0.17 | \$0.18 |
| 5/16 | 2 1/8 | 1/8 | 1/8 | .19 | .20 |
| 3/8 | 2 1/8 | 1/8 | 1/8 | .22 | .23 |
| 1/2 | 3 1/8 | 1/8 | 3/8 | .24 | .28 |
| 5/8 | 3 3/4 | 1/8 | 1/2 | .35 | .40 |
| 3/4 | 4 5/8 | 1/8 | 1/2 | .40 | .45 |
| 7/8 | 5 1/2 | 1 1/8 | 5/8 | .60 | .70 |
| 1 | 6 1/2 | 1 3/8 | 3/4 | .75 | .95 |
| 1 1/8 | 6 7/8 | 1 1/2 | 7/8 | 1.05 | 1.35 |
| 1 1/4 | 7 5/8 | 1 5/8 | 1 | 1.40 | 1.75 |

MATCH HOOKS AND THIMBLES

No. 6127

FOR MANILA ROPE

Drop forged; blacked and hot galvanized finishes; with round manila rope thimbles. Diameter or size of stock is obtained from largest part of the hooks in bend when hooks are closed.

Used in connection with sheet blocks, lifts, hoists and stays.



| Size, Inches | Length, Inches | Inside Diameter of Eye, Inches | Width Score of Thimble, Inches | Each | |
|-----------------|-------------------|--------------------------------------|--------------------------------------|--------|------------|
| | | | | Black | Galvanized |
| 1/4 | 2 1/8 | 1/8 | 1/8 | \$0.33 | \$0.35 |
| 5/16 | 2 5/8 | 1/8 | 1/8 | .35 | .38 |
| 3/8 | 3 | 1 | 1/2 | .38 | .40 |
| 1/2 | 3 1/8 | 1 1/8 | 1/8 | .43 | .45 |
| 5/8 | 4 3/4 | 1 1/8 | 1/8 | .55 | .60 |
| 3/4 | 5 5/8 | 1 3/8 | 1 | .85 | .90 |
| 7/8 | 6 1/8 | 1 5/8 | 1 1/8 | 1.00 | 1.10 |
| 1 | 6 3/8 | 1 3/4 | 1 1/4 | 1.20 | 1.50 |

Note—Black finish is not regularly carried in stock.

CROTCH HOOKS

No. 261

Forged and hot galvanized; used with boom crotches on sail boats.



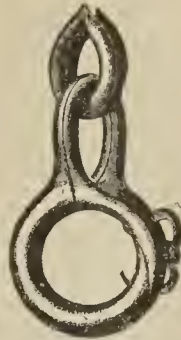
| Size, Nos. | Length, Inches | Width Plate, Inch | Diameter Hook, Inch | Plain Brass, per Pair | Galv., per Pair |
|---------------|-------------------|-------------------------|---------------------------|-----------------------------|-----------------------|
| 0 | 2 1/2 | 1/2 | 3/8 | \$0.60 | \$0.50 |
| 1 | 2 3/4 | 5/8 | 1/2 | .70 | .55 |
| 2 | 3 1/2 | 3/4 | 1/2 | 1.05 | .60 |
| 3 | 4 | 7/8 | 5/8 | 1.25 | .70 |
| 4 | 5 | 1 | 3/4 | 1.40 | .80 |

GAFF TOPSAIL HOOKS

COLEMAN'S PATENT

No. 6123

Hot galvanized, malleable iron; used extensively as mooring fastening, on gaff topsail sheet hooks, or where a secure fastening is wanted at the end of a line. This hook is locked by the leather thong passed through the hole in the hook lug with manila rope thimble.



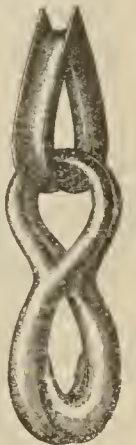
| Size, Inch | Length Inches | Inside Diam. of Eye, Inches | Width Score of Thimble, Inches | Each |
|---------------|------------------|--------------------------------------|---|--------|
| 1/4 | 2 3/4 | 1/2 | 7/8 | \$0.45 |
| 5/16 | 3 1/2 | 1/2 | 1 1/2 | .50 |
| 3/8 | 4 | 1/2 | 5/8 | .70 |
| 1/2 | 3 5/8 | 1 1/8 | 1 1/8 | .85 |
| 5/8 | 5 | 1 | 3/4 | 1.00 |
| 3/4 | 5 1/2 | 1 1/8 | 3/4 | 1.60 |
| | 6 1/2 | 1 1/4 | 1 | 2.70 |

SISTER HOOKS

No. 230

FOR WIRE ROPE

Drop forged; with wire rope thimble; hot galvanized finish. Diameter or size of iron is obtained from largest part of the hooks in the bend with hooks closed. Used in connection with sheet blocks, lifts, hoists and stays.



| Size, Inches | Length, Inches | Inside Diameter of Eye, Inches | Width Score of Thimble, Inches | Each | |
|-----------------|-------------------|--------------------------------------|--------------------------------------|--------|------------|
| | | | | Black | Galvanized |
| 1/4 | 2 1/4 | 9/16 | 3/8 | \$0.33 | \$0.35 |
| 5/16 | 2 5/8 | 5/8 | 1/4 | .35 | .38 |
| 3/8 | 2 7/8 | 1/2 | 1/8 | .38 | .40 |
| 1/2 | 3 5/8 | 7/8 | 1/8 | .45 | .48 |
| 5/8 | 4 1/8 | 1 | 1/2 | .55 | .60 |
| 3/4 | 4 7/8 | 1 1/8 | 5/8 | .85 | .90 |
| 7/8 | 5 1/2 | 1 1/4 | 3/4 | 1.00 | 1.10 |
| 1 | 6 | 1 5/8 | 7/8 | 1.25 | 1.50 |

ANCHOR TRIP HOOKS

CAST BRONZE

Cast bronze, polished. Used with 3 1/2 and 4 inch blocks; will handle anchor up to 75 lbs. Permits instant tripping of load.



| Nos. | For Blocks | Weight Each, Lbs. | Each |
|-------|---------------|----------------------|--------|
| 3 1/2 | Small | 7/8 | \$2.75 |
| 4 | Large | 1 1/8 | 3.85 |

HOLDING POWER OF LAG SCREWS

Per Inch of Thread

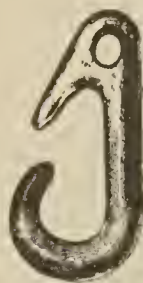
Because of the different growths and dryness of woods as specified below, figures are of necessity just averages.

| Diam. Thread, Inch | Holding Power, Lbs. | | |
|--------------------------|--------------------------|------------|--------|
| | Long Leaf Yellow Pine | Red Oak | Spruce |
| 1/4 | 1410 | 1470 | 700 |
| 5/16 | 1520 | 1740 | 800 |
| 3/8 | 1600 | 1865 | 930 |
| 1/2 | 1870 | 2230 | 1050 |

CARGO HOOKS

No. 6341

Drop forged steel, self colored. Meet government maximum strain tests.

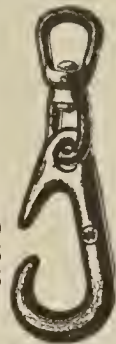


| Size Nos. | Length Hook, Inches | Size Hook Oval, Inches | Govt. Test, Lbs. | Weight Each, Lbs. | Each |
|-----------|---------------------|------------------------|------------------|-------------------|--------|
| 20 | 8 1/2 | 1 3/8 x 1 | 18,000 | 4 | \$1.60 |
| 21 | 10 1/2 | 1 5/8 x 1 1/4 | 29,000 | 7 1/2 | 2.70 |
| 22 | 12 1/2 | 2 1/4 x 1 5/8 | 51,800 | 14 1/2 | 4.10 |

WITH SWIVEL

No. 2851

Drop forged steel hooks and swivels, self colored.



| Size Nos. | Length Hook, Inches | Size Swivel, Inch | Size Hook Oval, Inches | Weight Each, Lbs. | Each |
|-----------|---------------------|-------------------|------------------------|-------------------|--------|
| 0 | 8 1/2 | 5/8 | 1 3/8 x 1 | 6 1/4 | \$4.10 |
| 1 | 10 1/2 | 7/8 | 1 5/8 x 1 1/4 | 12 3/4 | 5.75 |
| 2 | 12 1/2 | 1 | 2 1/4 x 1 5/8 | 23 | 9.25 |

HOIST OR PENNANT HOOKS



With eye; weldless. Drop forged high carbon steel, self colored. Used with chain hoists, slings, and load chains.

| Nos. | Length, Inches | Width, Inches | Diameter of Eye, Inside | Diameter of Eye, Outside | Load Required to Straighten Hook, Tons | Weight Each, Lbs. | Each |
|------|----------------|---------------|-------------------------|--------------------------|--|-------------------|--------|
| 22 | 4 1/8 | 2 7/8 | 3/4 | 1 1/8 | 1.9 | 1/2 | \$0.36 |
| 23 | 4 3/4 | 3 1/8 | 7/8 | 1 3/8 | 2.3 | 3/4 | .43 |
| 24 | 5 1/4 | 3 1/2 | 1 | 2 | 3 | 1 | .53 |
| 25 | 6 1/8 | 3 7/8 | 1 1/8 | 2 1/4 | 5.7 | 1 1/2 | .73 |
| 26 | 6 1/2 | 4 3/8 | 1 1/4 | 2 7/8 | 7 | 2 | 1.05 |
| 27 | 7 5/8 | 4 7/8 | 1 3/8 | 2 3/4 | 8.5 | 3 1/4 | 1.50 |
| 28 | 8 1/2 | 5 5/8 | 1 1/2 | 3 | 10 | 4 1/2 | 2.10 |
| 29 | 9 1/2 | 6 1/4 | 1 5/8 | 3 1/4 | 13 | 6 | 2.85 |
| 30 | 10 1/4 | 6 7/8 | 1 3/4 | 3 1/2 | 17 | 8 | 3.70 |
| 31 | 11 1/2 | 7 1/2 | 2 | 4 | 19 | 10 | 4.70 |
| 32 | 12 1/2 | 8 1/4 | 2 3/8 | 4 5/8 | 26 | 13 1/2 | 6.40 |
| 33 | 14 1/2 | 9 1/4 | 2 3/4 | 5 1/4 | 32 | 19 | 9.40 |
| 34 | 16 13/16 | 10 7/8 | 3 1/8 | 6 1/8 | 37.6 | 30 | 18.50 |
| 35 | 19 1/8 | 13 3/8 | 3 1/2 | 7 | 63.6 | 45 | 35.00 |

Note—Safe working load is about one quarter of straightening load.

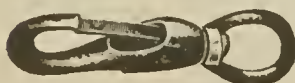
CHAIN GRAB HOOKS

Drop forged, mild tough steel, self colored.

| Nos. | For Chain, Inches | Weight per 100 Lbs. | Per Hundred |
|------|-------------------|---------------------|-------------|
| 601 | 1/4 | 27 | \$9.70 |
| 602 | 5/16 | 55 | 12.50 |
| 603 | 3/8 | 90 | 17.60 |
| 604 | 7/16 | 135 | 23.00 |
| 605 | 1/2 | 190 | 31.30 |



DUCK DECOY SNAPS



Swivel eye snap; flat spring.

| Nos. | Size, Inch | Weight per Gross, Lbs. | Per Gross |
|------------|------------|------------------------|-----------|
| 337 N. P. | 1/4 | 2 1/2 | \$17.50 |
| 337A Brass | 3/8 | 2 3/4 | 20.00 |
| 334 Galv. | 3/8 | 2 3/4 | 15.00 |

BOAT SNAPS



IMPROVED
No. 6119

In malleable iron, hot galvanized and polished cast brass. Tongue has a brass coil spring.

| Size, Nos. | Diameter of Eye, Inches | For Diam. Stay, Inches | Length, Inches | Each Galvanized | Pol. Brass |
|------------|-------------------------|------------------------|----------------|-----------------|------------|
| 0 | 7/8 | 1/4 | 2 | \$0.25 | \$0.55 |
| 1 | 5/8 | 5/8 | 2 3/4 | .30 | .60 |
| 2 | 3/4 | 3/8 | 3 1/8 | .35 | .75 |
| 3 | 7/8 | 1/2 | 3 7/8 | .40 | 1.00 |
| 4 | 1 | 5/8 | 4 1/8 | .45 | .... |
| 5 | 1 1/8 | 1 | 5 | .50 | .... |
| 6 | 1 1/4 | 1 1/8 | 5 3/8 | .60 | .... |

SNAP HOOKS

SWIVEL EYE

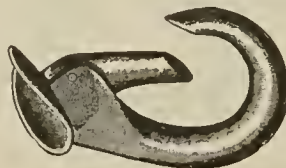
No. 251

Hot galvanized malleable iron, and polished cast brass. Tongue has a brass coil spring. Swivel eye prevents rope from kinking.



| Size, Nos. | Inside Diameter of Eye, Inches | For Diameter Stay, Inch | Length, Inches | Each Galvanized | Polished Brass Each |
|------------|--------------------------------|-------------------------|----------------|-----------------|---------------------|
| 1 | 9/16 | 5/16 | 3 1/4 | \$0.70 | \$0.75 |
| 2 | 3/4 | 3/8 | 3 1/4 | .80 | .85 |
| 3 | 3/4 | 1/2 | 4 1/2 | .90 | 1.25 |
| 4 | 13/16 | 5/8 | 4 3/4 | 1.00 | .... |
| 5 | 1 1/16 | 7/8 | 5 3/4 | 1.25 | .... |

JIB SNAP HOOKS



IMPROVED
No. 6121

In hot galvanized malleable iron With ferrule for lashing to jib.

| Size, Nos. | For Diameter Stay, Inch | Length, Inches | Each Galvanized | Per Gross Brass |
|------------|-------------------------|----------------|-----------------|-----------------|
| 0 | 1/4 | 1 5/8 | \$0.25 | |
| 1 | 5/16 | 2 | .30 | |
| 2 | 3/8 | 2 3/8 | .35 | |
| 3 | 1/2 | 2 3/4 | .40 | |
| 4 | 5/8 | 3 | .45 | |

CURTAIN SNAPS

Galvanized malleable iron and polished cast brass finishes with riveted springs. For curtain and awning work. Brass snaps have brass springs.



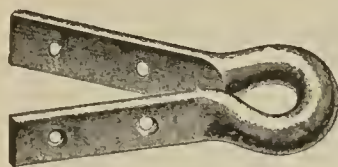
| No. | 2/0—Length, 1 7/8 Inches; Diameter of Eye, 5/8 Inch; Weight per Gross, 3 1/8 Lbs. | \$5.00 | \$18.00 |
|-----|---|--------|---------|
|-----|---|--------|---------|

Price when permitted to dominate purchase consideration frequently means delay, disappointment and loss. Particularly is this true with marine fittings, which by the very nature of their use must reflect the price paid in the kinds of material and workmanship put into them, or for the strenuous service they must render.

BOB-STAY SHACKLES

No. 6237

Hot galvanized finish or cast brass, with either plain or polished finish. Counter-sunk holes. Fastens to stem of a sail boat to take the end of a bob-stay or jib stay.



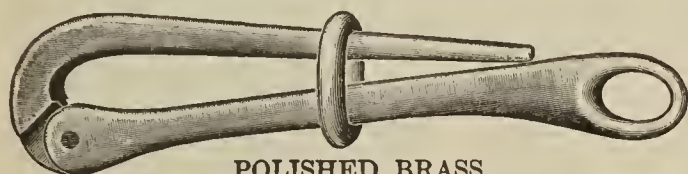
| Diam. Eye Iron, Inch | Length Overall, Inches | Length of Strap, Inches | Each | |
|-------------------------------|------------------------------|-------------------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 3/8 | 4 | 2 1/2 | \$0.75 | \$1.10 |
| 7/16 | 4 3/8 | 3 | .85 | 1.40 |
| 1/2 | 5 | 3 1/2 | .95 | 1.70 |
| 5/8 | 6 | 4 | 1.10 | 2.80 |
| 3/4 | 8 | 5 | 3.40 | .... |

PELICAN HOOKS

Drop forged, hot galvanized. Used with mooring hooks, for hoists and connecting links for guard lines on ferry boats, docks and for use on davits. No. 5067—1/2 Inch Iron; Length Closed, 10 Inches..\$1.35



RELEASE HOOKS



POLISHED BRASS

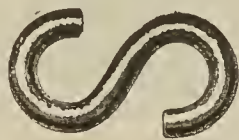
Used principally for tenders and life boats and occasionally for use with anchors.

| Nos. | Length Overall Closed, Inches | Each |
|------|----------------------------------|--------|
| 30 | 3 1/2 | \$1.30 |
| 31 | 6 | 1.60 |

S HOOKS

No. 6199

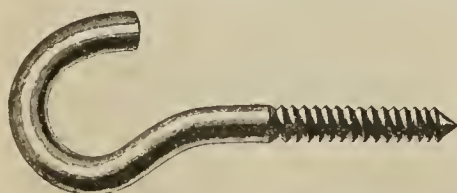
Heavy wrought iron, hot galvanized. Blunt point hooks carried in stock only; pointed end hooks furnished to order.



| Length, Inches | Size Stock, Inch | Weight per Gross, Lbs. | Per Dozen |
|-------------------|---------------------|---------------------------|--------------|
| 1 1/2 | 3/16 | 3/10 | \$0.50 |
| 1 3/4 | 3/16 | 3/5 | .60 |
| 2 | 1/4 | 1 1/4 | .75 |
| 2 1/4 | 1/4 | 2 | .80 |
| 2 1/2 | 1/4 | 3 | 1.00 |
| 3 | 5/16 | 5 | 1.20 |
| 3 1/2 | 3/8 | 9 1/2 | 1.50 |

Thirty-six in a Package

WROUGHT SCREW HOOKS



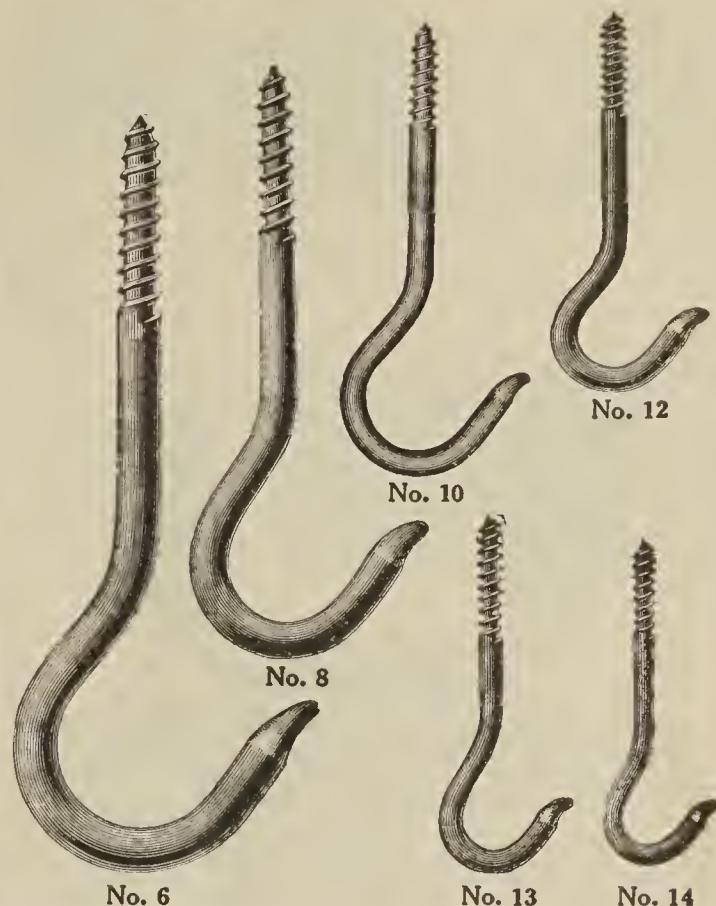
REGULAR

No. 6197

Wrought iron; hot galvanized; lag screw thread.

| Size, Inch | Extreme Length Inches | Per Dozen |
|---------------|--------------------------|--------------|
| 1/4 | 4 1/4 | \$0.82 |
| 5/16 | 4 1/2 | 1.05 |
| 3/8 | 4 7/8 | 1.30 |
| 1/2 | 6 | 2.45 |

WIRE SCREW HOOKS



Bright wire; rolled thread.

| Cadmium Plated Nos. | Brass Nos. | Length over all, Inches | Hook Inside, Inches | Weight per Gross, Lbs. | Cadmium Plated, Per Gross | Brass Per Gross |
|---------------------------|---------------|-------------------------------|---------------------------|------------------------------|---------------------------------|-----------------------|
| 0 | .... | 4 15/16 | 1 1/8 | 20 | \$4.75 | .... |
| 1 | .... | 4 11/16 | 1 1/16 | 16 | 4.00 | .... |
| 2 | .... | 4 7/16 | 1 1/32 | 13 | 3.50 | .... |
| 3 | .... | 4 1/8 | 1 1/32 | 11 | 2.75 | .... |
| 4 | .... | 3 7/8 | 2 9/32 | 9 | 2.25 | .... |
| 5 | .... | 3 5/8 | 7/8 | 7 | 2.00 | .... |
| 6 | 1006 | 3 3/8 | 13/16 | 6 | 1.50 | \$6.25 |
| 6 1/2 | .... | 3 1/16 | 1 1/16 | 4 1/2 | 1.50 | .... |
| 7 | 1007 | 2 13/16 | 5/8 | 3 | 1.25 | 5.50 |
| 8 | 1008 | 2 9/16 | 9/16 | 2 | 1.10 | 3.50 |
| 9 | 1009 | 2 5/16 | 15/32 | 1 1/2 | 1.00 | 3.00 |
| 10 | 1010 | 2 1/16 | 13/32 | 1 1/4 | .85 | 2.25 |
| 11 | 1011 | 1 7/8 | 3/8 | 1 | .75 | 1.75 |
| 12 | 1012 | 1 11/16 | 1 1/32 | 3/4 | .70 | 1.50 |
| 13 | 1013 | 1 1/2 | 5/16 | 1/2 | .60 | 1.50 |
| 14 | 1014 | 1 1/16 | 9/32 | 1/2 | .50 | 1.00 |

Up to No. 5 Seventy-two, Smaller Sizes 144 in a Carton

The products illustrated and described in this catalog were designed by marine experts in every line. They are found on many of the finest yachts and power boats afloat.

All Tiebout items embody the best in material, workmanship and finish and while they are designed primarily for service, appearance has been given every consideration, so that they will add to the attractiveness of fine yachts.

Meet the requirements of the fastidious yachtsman and the critical marine engineer.

The W. & J. Tiebout line of marine hardware is most complete and covers the requirements of both the larger yachts and the smaller pleasure craft, such as motorboats, yacht tenders, outboards, dinkeys and the like. It also includes a number of products that cannot be obtained elsewhere.

CHEST OR SKYLIGHT HANDLES



CAST BRASS

Extra heavy cast brass, polished finish with solid grip. Handle stops on grip ends. No. 300 is extra heavy special.

| Nos. | Length Overall, Inches | Per Dozen |
|------|------------------------|-----------|
| 100 | 5 | \$24.76 |
| 200 | 7 | 27.85 |
| 300 | 7½ | 42.31 |

CHEST HANDLES



Cast brass, polished finish. Has riveted hinge ends and solid grip handle with stop.

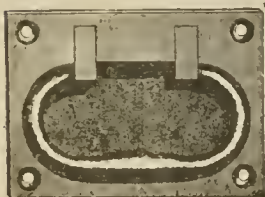
| Nos. | Size, Inches | Weight per Dozen Pairs, Lbs. | Per Dozen |
|------|--------------|------------------------------|-----------|
| 310 | 3 x 1½ | 3 | \$6.50 |
| 311 | 3¾ x 1¾ | 3¼ | 7.50 |
| 312 | 4½ x 1½ | 4¼ | 8.00 |



Cast brass, polished finish. Has loose brass ends and solid grip with stop.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 300 | 2 | \$3.00 |
| 301 | 2¾ | 4.20 |
| 302 | 3¼ | 4.80 |
| 303 | 3¾ | 6.00 |

FLUSH CHEST HANDLES



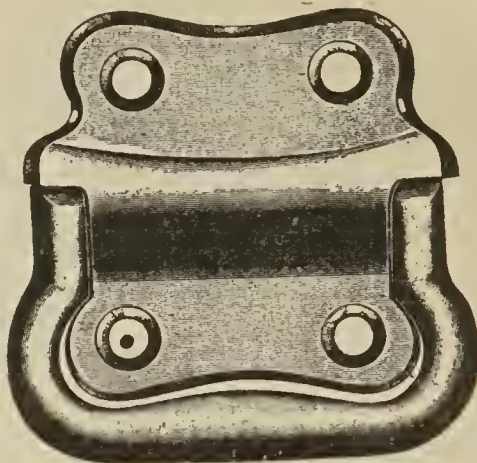
CAST BRASS

Cast brass, polished finish. With heavy cast brass plate and grip.

| Regular Pattern | | |
|-----------------|--------------|-----------|
| Size, Nos. | Size, Inches | Per Dozen |
| 5 | 3 x 2¼ | \$16.80 |
| 6 | 3¾ x 3 | 24.00 |
| Extra Heavy | | |
| 1 | 3½ x 2½ | 23.94 |
| 2 | 4¾ x 3¾ | 51.60 |

"Locks and Latches for Doors and Hatches."

CHEST HANDLES



CAST BRASS No. 5723

Extra heavy pattern. Cast brass polished finish. Loose plate and solid grip handle.

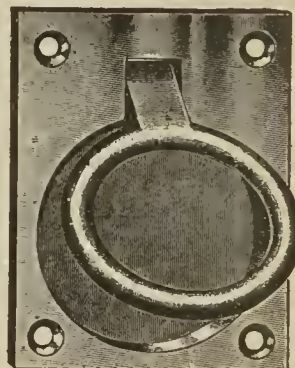
| Size, Nos. | Size, Inches | Per Dozen |
|------------|--------------|-----------|
| 0 | 2½ x 2½ | \$9.00 |
| 10 | 3 x 3 | 11.00 |
| 30 | 4 x 4 | 16.00 |

FLUSH RINGS

CAST BRASS No. 5729

Made in cast brass polished finish. For chests, trap doors, etc. Furnished in heavy and extra heavy patterns.

| Heavy | | |
|-------------|--------------|-----------|
| Size Nos | Size, Inches | Per Dozen |
| 3 | 2½ x 2 | \$6.40 |
| Extra Heavy | | |
| 4 | 2¾ x 2¼ | 19.20 |
| 5 | 3¾ x 2¾ | 20.65 |
| 6 | 4¾ x 3½ | 38.80 |



CAST BRASS LIGHT ROUND PATTERN No. 5731

Cast brass polished finish. Light pattern for locker seats, floor boards, etc.



| Size, Nos. | Size, Inches | Per Dozen |
|------------|--------------|-----------|
| 2 | 1½ | \$3.00 |
| 2½ | 1¾ | 5.00 |

LIGHT SQUARE PATTERN

Cast brass, polished finish. For seat lockers, floor boards, trap doors, cabinets, etc.

No. 5733—1½ x 1½ Inches.....\$3.00



RINGS ON PLATES

CAST BRASS FANCY PATTERN No. 5737

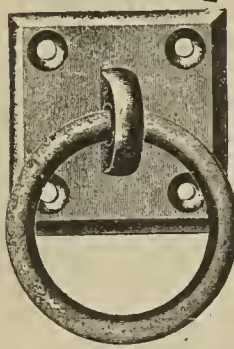
Cast brass, polished finish. Fancy plate, riveted staple and solid ring.



| Size, Nos. | Size, Inches | Per Dozen |
|------------|--------------|-----------|
| 1 | ¼ x 1¾ | \$10.50 |
| 2 | ¾ x 2 | 15.75 |

RINGS ON PLATES

SQUARE PATTERN



Made in cast brass, polished, with bevelled edge plate and iron, hot galvanized with plain edge plate, ring and staple of metal to match.

Cast Brass

| Nos. | Size Ring, Inches | Size Plate, Inches | Per Dozen |
|-----------------|-----------------------------------|------------------------------------|-----------|
| 0 | $\frac{3}{8} \times 1$ | $1\frac{1}{8} \times 1\frac{5}{8}$ | \$7.35 |
| 3 | $\frac{3}{8} \times 1\frac{3}{4}$ | $2\frac{1}{4} \times 2\frac{1}{4}$ | 16.80 |
| 4 | $\frac{3}{8} \times 2\frac{1}{4}$ | 3 x 3 | 44.00 |
| Galvanized Iron | | | |
| 2944 | $\frac{1}{2} \times 2$ | 2x2 | \$5.95 |
| Extra Heavy | | | |
| 2945 | $\frac{3}{8} \times 2\frac{1}{2}$ | 3x3 | 14.00 |

RING AND DECK STRAP

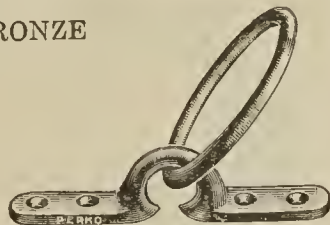
CAST BRONZE

Diameter of ring, $1\frac{5}{8}$ Ins.

Length of Strap 3 Ins.

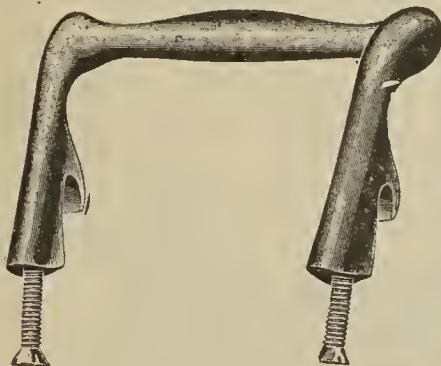
Width of Strap $\frac{5}{8}$ Ins.

Weight 4 Ozs.



| | |
|-----------------------|--------|
| Polished Bronze | Each |
| Nickel Plated | \$0.90 |
| Chromium Plated | 1.15 |
| | 1.75 |

TRAY HANDLES



CAST BRASS

Cast brass; polished finish. For wood trays and baskets. Machine screw fastened.

Per Dozen

No. 5715 —
Size, 3 Inches..\$7.20



CAST BRASS

Cast brass; polished finish. For deep wood trays and servers.

Per Dozen

No. 5711 —
Size, 3 Inches..\$5.50



CAST BRASS

No. 5709

Cast brass; polished finish. For light wood trays and servers.

| Size Nos. | Size, Inches | Per Dozen |
|-----------|----------------|-----------|
| 01 | 2 | \$3.60 |
| 02 | $2\frac{1}{2}$ | 5.50 |
| 03 | $3\frac{1}{2}$ | 12.00 |

SAFETY HASPS

SECURITY

Polished cast brass with solid plate staple. Hasp when fastened covers all screws preventing removal.



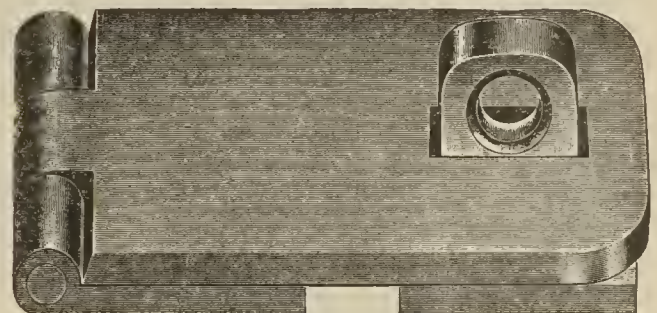
| Nos. | Length, Inches | Width, Inches | Per Dozen |
|------|----------------|----------------|-----------|
| 100 | $2\frac{7}{8}$ | 1 | \$6.60 |
| 102 | $3\frac{3}{4}$ | $1\frac{1}{8}$ | 9.00 |
| 103 | $5\frac{1}{4}$ | $1\frac{1}{8}$ | 18.00 |

Polished cast brass. Vertical staple permitting the padlock to lie flat against the door.



Per Dozen

No. 101—Length Strap, $3\frac{1}{4}$ Ins.; Width, $1\frac{1}{8}$ Ins...\$9.00

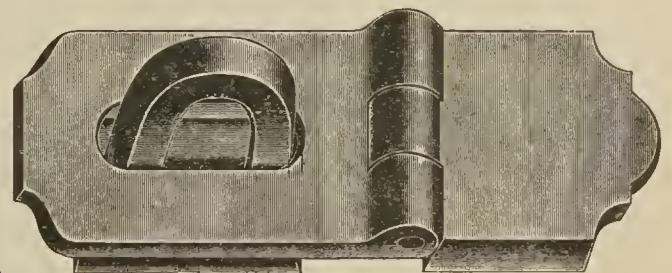


EXTRA HEAVY

Cast brass; highly polished, natural brass finish. Extra heavy joints and plate staple.

Per Dozen

No. 2634—Length, $4\frac{1}{2}$ Inches; Width, $1\frac{5}{8}$ Inches...\$23.00



STORE DOOR

Extra heavy cast brass; polished finish. Furnished with three inch machine screws that go through the door from inside and screw into back of hasp.

Per Dozen

No. 21—Length, $5\frac{1}{4}$ Inches; Width, $1\frac{1}{8}$ Inches....\$25.00

PLATE STAPLES FOR HASPS

GALVANIZED

Made of wrought steel and heavily galvanized.



| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|------------------------------------|------------------------|-----------|
| 3 | $1\frac{1}{2} \times 1\frac{1}{8}$ | $\frac{3}{4}$ | \$0.84 |
| 6 | $1\frac{7}{8} \times 1\frac{1}{4}$ | 1 | 1.08 |
| 8 | $2 \times 1\frac{1}{2}$ | $1\frac{1}{2}$ | 2.16 |
| 10 | $2\frac{3}{4} \times 2$ | $3\frac{1}{2}$ | 2.88 |

SAFETY HASPS



No. 5331
Wrought steel; galvanized; brass pins. This hasp when fastened covers all of the screws so they cannot be removed. The adjustable feature of the staple permits the hasp to operate when the position of the door is changed by shrinkage. The staple is in a vertical position, which permits the padlock to lie flat against the door.

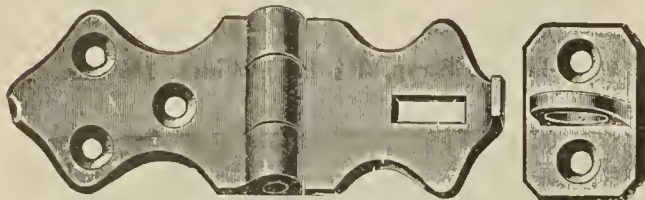
mits the hasp to operate when the position of the door is changed by shrinkage. The staple is in a vertical position, which permits the padlock to lie flat against the door.

| Length Strap, Inches | Width at Joint, Inches | For Screws, Nos. | Weight per Dozen, Lbs. | Dozen in a Case | Weight per Case, Lbs. | Per Hundred |
|----------------------|------------------------|------------------|------------------------|-----------------|-----------------------|-------------|
| 3½ | 1½ | 7 | 5¾ | 25 | 92 | \$37.20 |
| 4½ | 1½ | 7 | 6 | 25 | 119 | 46.92 |
| 6 | 1¾ | 9 | 9 | 10 | 93 | 67.20 |
| *7 | 2½ | . | 23 | 5 | 115 | 129.84 |

* Extra heavy.

One in a Box with Screws

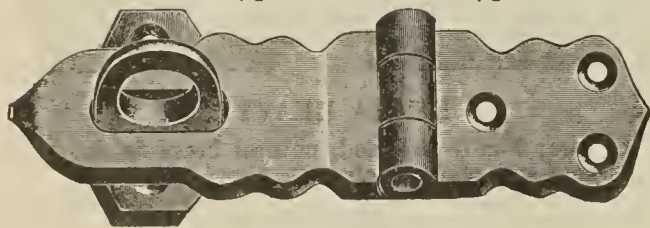
HINGE HASPS



Style 5333

Cast brass; short strap hasp; highly polished finish.

| Nos. | Length, Inches | Width, Inches | Per Dozen |
|------|----------------|---------------|-----------|
| 0 | 3½ | 1¾ | \$6.60 |
| 10 | 5 | 1½ | 11.00 |
| 12 | 3¾ | 1¼ | 11.00 |



Style 5349

Cast brass; polished finish; with narrow plate staple.

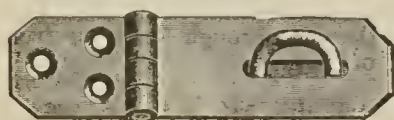
No. 11—Length, 5½ Inches; Width, 1¾ Inches.....\$11.00



Style 5347

Long strap pattern; cast brass; polished finish.

No. 13—Length, 4½ Inches; Width, ⅝ Inch.....\$5.50



Light pattern; polished wrought brass.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 418 | 2¾ | \$1.90 |
| 419 | 3 | 2.50 |

Swivel Staple



Fig. 5325

| No. | Length Over-All, Inches | Width, Inches | Per Dozen |
|------|-------------------------|---------------|-----------|
| 2635 | 5 | 1¼ | \$18.00 |

HINGE HASPS



Cast brass; plain and polished finishes.

Style 5345

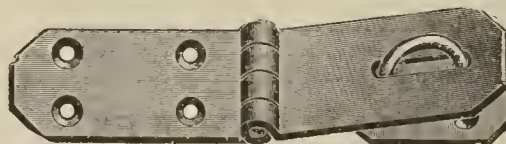
| Nos. | Length Overall, Inches | Length Strap, Inches | Width, Inches | Per Dozen | |
|------|------------------------|----------------------|---------------|-------------|----------------|
| | | | | Plain Brass | Polished Brass |
| 2648 | 6 | 3½ | 1¼ | \$9.00 | \$15.80 |
| 2649 | 8 | 4½ | 1¼ | 13.20 | 19.20 |
| 2650 | 10 | 5¾ | 1¾ | 16.80 | 24.00 |
| 2651 | 12 | 6¾ | 1¾ | 24.00 | 33.20 |



Rolled steel, galvanized; with brass pins.

No. 5341

| Length Strap, Inches | Width, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------------|---------------|------------------------|-----------|
| 3 | 1⅛ | 2 | \$2.52 |
| 4½ | 1⅞ | 2¾ | 3.24 |
| 6 | 1⅞ | 5 | 4.56 |
| 8 | 1⅞ | 7¾ | 6.96 |
| 10 | 2⅞ | 12½ | 11.04 |
| | 2¾ | 19 | 17.88 |

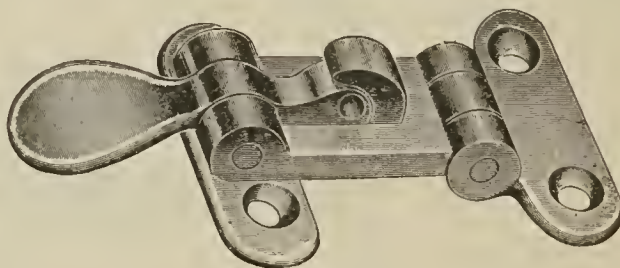


Style 5355

Polished wrought brass; light strap staples with riveted plate staple.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 420 | 3½x¾ | \$2.70 |
| 421 | 4 x¾ | 4.00 |

AUTO HASPS

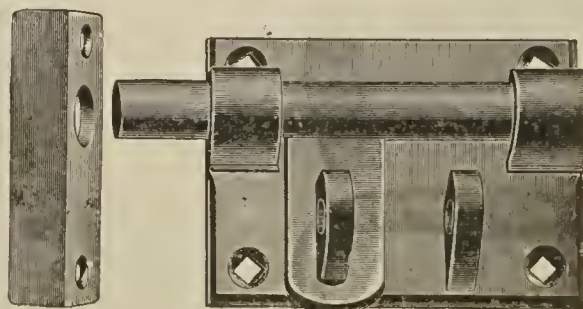


Style 5359

Tool box and compartment locking hasp. Prevents rattling; ¼ inch hole in lever for padlock. Polished cast brass.

No. 2653—Size, 4x2 Inches.....\$13.50

COMBINATION HASPS AND BOLTS

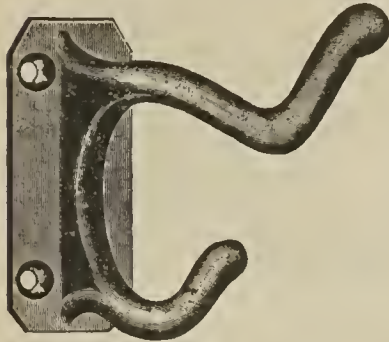


Style 5357

Furnished with right or left hand striking plates and bolts for fastening to door. Bolt can be padlocked in either position. Cast brass; polished finish.

No. 2652—Size Plate, 3x4¼ Inches; Size Bolt, 4½x1½ Inches.....\$8.75

COAT AND HAT HOOKS



CAST BRASS

Cast brass; polished finish. Short heavy pattern.

Per Dozen

No. 416—Projection, 3 Inches.....\$7.50

CAST BRASS

Cast brass; close pattern. Polished finish.

Per Dozen

No. 6—Projection, 2¼ Inches..\$4.80



CAST BRASS

Solid cast brass; standard pattern. Polished finish.

Per Dozen

No. 10—Projection, 2½ Inches.....\$7.20

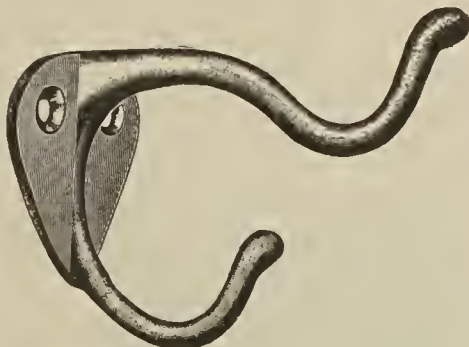


CAST BRASS

Cast brass; polished finish. Improved pattern.

Per Dozen

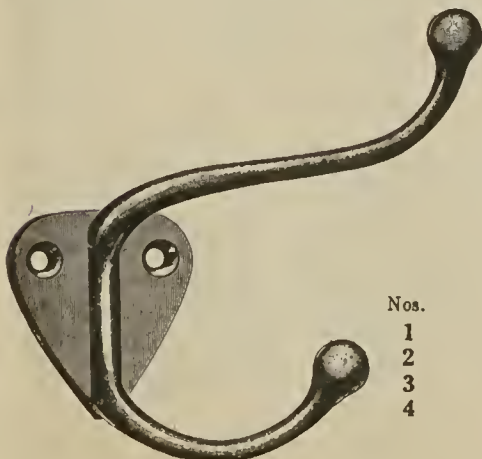
No. 11—Projection, 3¼ Inches.....\$4.50



CAST BRASS

Cast brass; regular pattern. Polished finish.

| Nos. | Projection, Inches | Per Dozen |
|------|--------------------|-----------|
| 1 | 2¼ | \$3.80 |
| 2 | 3 | 4.10 |
| 3 | 3½ | 4.30 |
| 4 | 3¾ | 10.25 |



COAT AND HAT HOOKS



CAST BRASS

Cast brass; heavy hat rack pattern, single hook. Polished finish.

Per Dozen

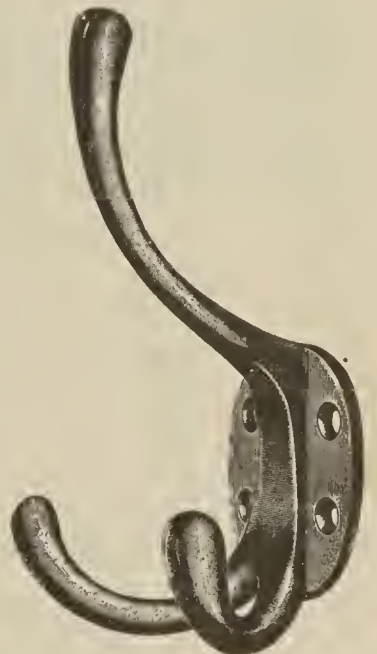
No. 2839—Projection, 3¼ Inches\$15.00

CAST BRASS

Cast brass; heavy hat rack pattern, double hook, costumer style. Polished finish.

Per Dozen

No. 2837—Projection, 3½ Inches.....\$30.00



CAST BRASS

Solid cast brass with ball end arms and large hat pin. Costumer style.

Per Dozen

No. 2836—Projection, 4¾ Inches\$24.00



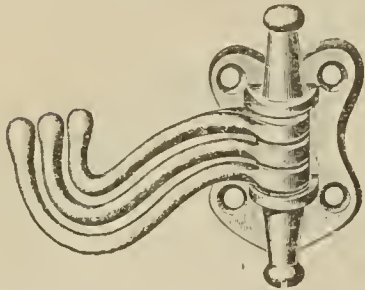
TIEBOUT BRASS GOODS

In building up the W. & J. Tiebout line of brass hardware, a most careful study has been made of every item with a view to securing absolutely dependable quality at the least possible cost.

In designing TIEBOUT brass goods, quality is never sacrificed to make a "price" and useless expense is excluded in every instance.

Efficient factory organization and equipment permit large production of excellently made and finished goods at minimum cost. Large stocks in New York insure prompt deliveries.

COAT AND HAT HOOKS



SWIVEL
Style 5545

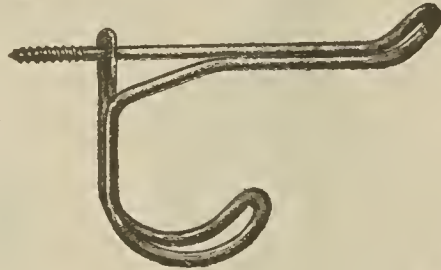
Cast brass; polished nickel finish with three swinging hooks and steeple pin.

Per Dozen

No. 2834—Projection, 4¾ Inches....\$63.00

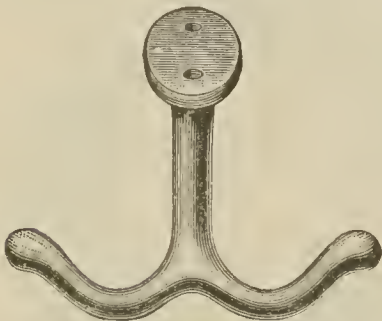
BRASS OR GALVANIZED WIRE

Wrought brass or galvanized steel wire with regular wood screw thread; three inch projection.



Hot Galvanized Wire\$2.75
Wrought Brass Wire17.50

CEILING HOOKS



Style 5571

Cast brass; polished finish; regular pattern fastened with two wood screws.

Per Dozen

No. 5571—Size Overall, 2½ Inches..\$5.40

WARDROBE HOOKS



Single—Style 5565



Double—Style 5567

Cast brass, polished finish. For small wardrobes and lockers.

| No. | Projection, Inches | Per Dozen |
|----------|--------------------|-----------|
| 1 Single | 1⅜ | \$2.80 |
| 2 Double | 1⅜ | 4.30 |



HEAVY
Style 5569

Cast brass; heavy pattern, single wardrobe or locker hook.

Per Dozen

No. 2840—1⅝ Inch Projection.\$6.60

RAZOR STROP HOOKS

Cast brass in nickel plated or polished brass finishes; 1⅝ inch projection.

| No. | Finish | Per Dozen |
|------|----------------|-----------|
| 2841 | Polished Brass | \$2.40 |
| 2842 | Nickel Plated | 2.64 |



PITCHER AND CUP HOOKS



CAST BRONZE
No. 2847

Cast bronze, emery finish. Have standard screw thread.

| Projection, Inches | Per Dozen |
|--------------------|-----------|
| 1 | \$6.00 |
| 1½ | 8.00 |
| 2 | 10.00 |

BRASS WIRE CUP HOOKS

No. 5581

Wrought brass wire, dipped finish with standard wood screw thread. With pressed brass shoulder.



| Size, Inch | Weight per Gross, Lbs. | Per Gross | Size, Inches | Weight per Gross, Lbs. | Per Gross |
|------------|------------------------|-----------|--------------|------------------------|-----------|
| 3/8 | 1/8 | \$3.65 | 1 1/8 | 1 5/8 | \$7.00 |
| 1/2 | 1/4 | 3.75 | 1 1/4 | 2 | 9.00 |
| 5/8 | 1/2 | 3.85 | 1 1/2 | 2 1/2 | 11.00 |
| 3/4 | 3/4 | 4.00 | 1 3/4 | 3 | 15.00 |
| 7/8 | 1 | 4.50 | 2 | 3 3/4 | 18.00 |
| 1 | 1 3/8 | 5.25 | ... | ... | .... |

BRASS WIRE SHOULDER SCREW HOOKS



No. 5579

Wrought brass wire, dipped finish with standard wood screw thread.

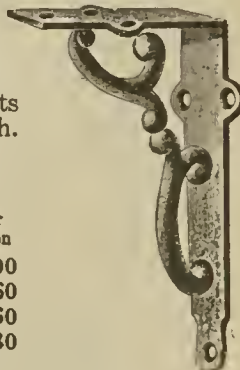
| Size, Inch | Weight per Gross, Lbs. | Per Gross | Size, Inches | Weight per Gross, Lbs. | Per Gross |
|------------|------------------------|-----------|--------------|------------------------|-----------|
| 1/2 | 1/4 | \$3.75 | 1 1/4 | 2 | \$9.00 |
| 5/8 | 1/2 | 3.85 | 1 1/2 | 2 1/2 | 11.00 |
| 3/4 | 3/4 | 4.00 | 1 3/4 | 3 | 15.00 |
| 1 | 1 1/2 | 5.25 | 2 | 3 3/4 | 18.00 |

CAST BRASS SHELF BRACKETS

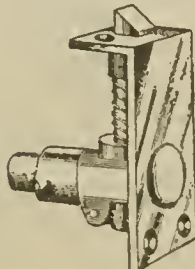
Ornamental cast brass shelf brackets in highly polished natural brass finish. Holes countersunk for flat head screws.

No. 5839

| Size, Inches | Per Dozen |
|--------------|-----------|
| 4x3 | \$12.00 |
| 5x4 | 15.60 |
| 8x6 | 21.60 |
| 10x8 | 34.80 |



SPRING DRAWER CATCHES



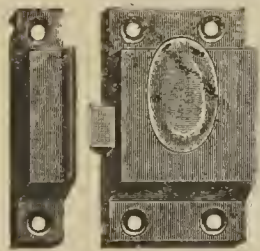
Push button type operation; fits any 7/8 inch or thicker drawer front. Cast brass; polished finish. Size of plate 1⅞x7/8 inch.

No. G—Polished\$1.90

CUPBOARD TURNS

CAST BRASS

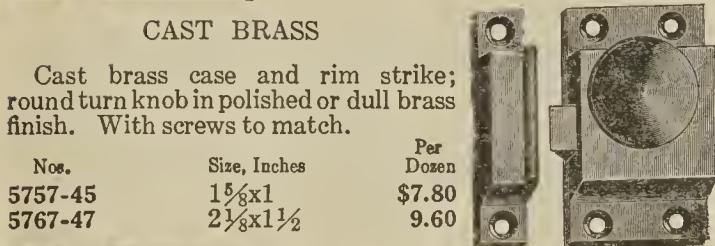
Cast brass case and rim strike in polished and dull brass finish. Oval turn knob with screws to match.



| Nos. | Size, Inches | Per Dozen |
|---------|----------------------------------|-----------|
| 5755-40 | 1 $\frac{5}{8}$ x1 | \$7.80 |
| 5763-42 | 2 $\frac{1}{8}$ x1 $\frac{1}{2}$ | 9.60 |

CAST BRASS

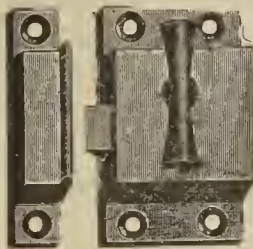
Cast brass case and rim strike; round turn knob in polished or dull brass finish. With screws to match.



| Nos. | Size, Inches | Per Dozen |
|---------|----------------------------------|-----------|
| 5757-45 | 1 $\frac{5}{8}$ x1 | \$7.80 |
| 5767-47 | 2 $\frac{1}{8}$ x1 $\frac{1}{2}$ | 9.60 |

CAST BRASS

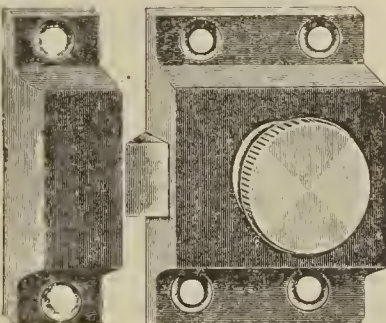
Cast brass case and rim strike. T turn knob in polished and dull brass finish. With screws to match.



| Nos. | Size, Inches | Per Dozen |
|---------|----------------------------------|-----------|
| 5759-50 | 1 $\frac{5}{8}$ x1 | \$7.80 |
| 5765-52 | 2 $\frac{1}{8}$ x1 $\frac{1}{2}$ | 9.60 |

CAST BRASS

Cast brass case and rim strike. Knurled edge round turn knob in polished brass finish only. With screws to match.

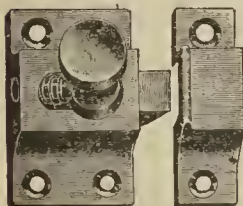


| No. | Size, Inches | Per Dozen |
|---------|---------------------|-----------|
| 5769-20 | 2 x 1 $\frac{3}{4}$ | \$15.00 |

CUPBOARD CATCHES

CAST BRASS

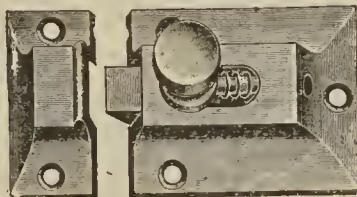
Cast brass case and rim strike in polished and dull brass finish; round slide knob. With screws to match.



| No. | Size, Inches | Per Dozen |
|---------|------------------------------------|-----------|
| 5749-30 | 1 $\frac{5}{16}$ x1 $\frac{3}{16}$ | \$5.40 |

CAST BRASS

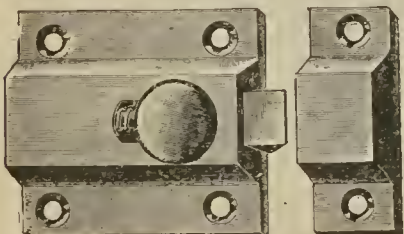
Cast brass case and rim strike in polished and dull brass finish; round slide knob. With screws to match.



| Nos. | Size, Inches | Per Dozen |
|---------|-----------------------------------|-----------|
| 5751-31 | 1 $\frac{1}{4}$ x1 $\frac{1}{2}$ | \$6.00 |
| 5751-32 | 1 $\frac{1}{16}$ x1 $\frac{1}{8}$ | 7.20 |

CAST BRASS

Cast brass case and rim strike in polished and dull brass finish; round slide knob. With screws to match.

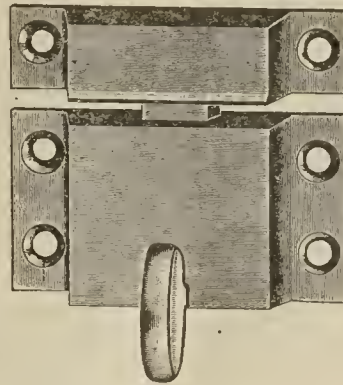


| Nos. | Size, Inches | Per Dozen |
|---------|----------------------------------|-----------|
| 5753-10 | 1 $\frac{1}{4}$ x1 $\frac{1}{4}$ | \$8.70 |
| 5753-11 | 2 x 1 $\frac{3}{8}$ | 12.25 |

TRANSOM CATCHES

CAST BRASS

Cast brass case and rim strike; with ring pull. Polished brass finish. Can also be furnished, on order, with flat plate strike.

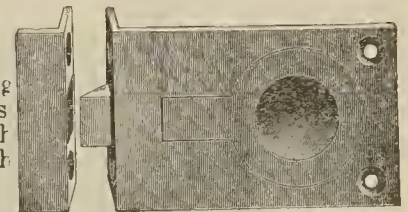


| No. | Size, Inches | Per Dozen |
|--------|----------------------------------|-----------|
| 5773-1 | 2 $\frac{1}{8}$ x1 $\frac{1}{4}$ | \$9.60 |

SHOW CASE SPRING CATCHES

CAST BRASS

A flush showcase spring catch made of cast brass. Has a ring lever knob which lies flush to face of catch when closed.

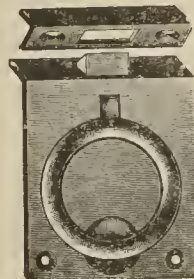


| Nos. | Size, Inches | Per Dozen |
|--------|----------------------------------|-----------|
| 5745-0 | 1 $\frac{1}{2}$ x1 $\frac{1}{8}$ | \$6.00 |
| 5745-1 | 2 x 1 $\frac{1}{4}$ | 7.20 |
| 5745-2 | 2 $\frac{1}{4}$ x2 $\frac{1}{4}$ | 15.00 |

FLUSH RING CATCHES

CAST BRASS

Cast brass polished finish. For small closet doors, seat lockers, etc.



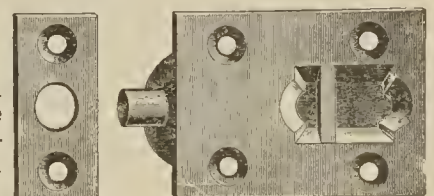
| No. | Size, Inches | Per Dozen |
|------|----------------------------------|-----------|
| 2947 | 2 $\frac{7}{8}$ x2 $\frac{1}{2}$ | \$35.00 |

FLUSH SASH BOLTS

CAST BRASS

Style 5747

Cast brass, polished finish; with flat strike plate. Bolt has a friction spring to hold it in place.

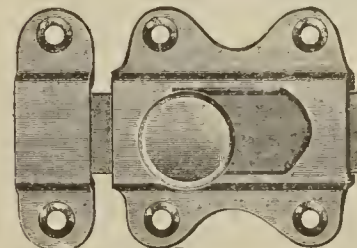


| Nos. | Size, Inches | Per Dozen |
|------|----------------------------------|-----------|
| 2948 | 1 $\frac{1}{4}$ x1 $\frac{3}{4}$ | \$9.30 |
| 2949 | 1 $\frac{1}{2}$ x1 $\frac{3}{4}$ | 10.35 |
| 2950 | 1 $\frac{1}{2}$ x2 | 12.25 |

CUPBOARD BOLTS

CAST BRASS

Cast brass; polished finish. Flat bolt with round knob.

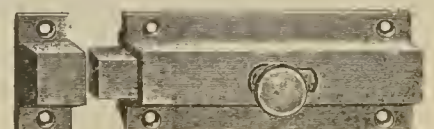


| No. | Size, Inches | Per Dozen |
|--------|----------------------------------|-----------|
| 5419-1 | 1 $\frac{5}{8}$ x1 $\frac{5}{8}$ | \$7.80 |

CASED BOLTS

CAST BRASS

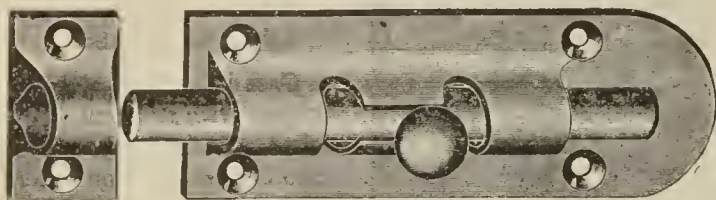
Cast brass; polished finish; heavy square spring bolt with round knob.



| No. | Size, Inches | Per Dozen |
|------|----------------------------------|-----------|
| 2781 | 1 $\frac{5}{8}$ x3 $\frac{3}{4}$ | \$13.10 |

BARREL BOLTS

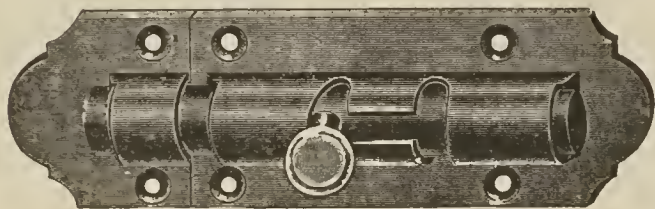
CAST BRASS



LIGHT PATTERN
Style 5427

Cast brass; round knob; polished finish.

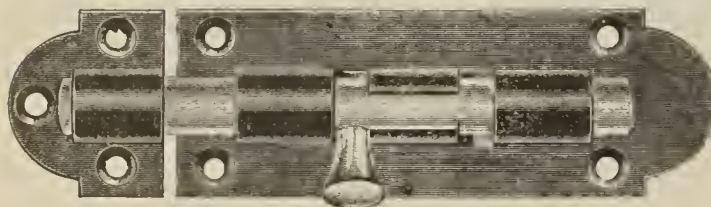
| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------|------------------------|-----------|
| 1 | 2 1/4 x 1 1/8 | 1 1/2 | \$6.50 |
| 2 | 3 x 1 1/4 | 2 | 8.75 |
| 3 | 4 x 1 1/4 | 3 | 10.80 |
| 4 | 5 x 1 1/2 | 4 1/2 | 14.50 |
| 5 | 6 x 1 1/2 | 5 1/2 | 18.00 |



EXTRA HEAVY PATTERN
Style 5433

Cast brass; polished finish; heavy bolt; round knob.

| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|--------------|------------------------|-----------|
| 2775 | 3 x 1 3/8 | 3 1/2 | \$22.05 |
| 2776 | 4 x 1 5/8 | 5 | 26.25 |
| 2777 | 5 x 1 5/8 | 6 1/2 | 32.55 |
| 2778 | 6 x 1 5/8 | 8 | 42.00 |
| 2779 | 8 x 2 | ... | 52.50 |
| 2780 | 10 x 2 | ... | 68.25 |

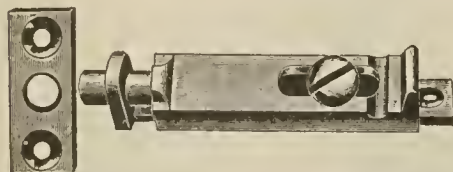


WROUGHT STEEL—GALVANIZED

Heavy pattern; riveted plates; brass knob.

| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|--------------|------------------------|-----------|
| 2769 | 3 x 1 3/8 | 2 1/2 | \$5.78 |
| 2770 | 4 x 1 1/2 | 3 | 5.88 |
| 2771 | 5 x 1 1/2 | 4 1/8 | 6.96 |
| 2772 | 6 x 1 5/8 | 4 5/8 | 7.80 |
| 2773 | 8 x 1 3/4 | ... | 14.28 |

CUPBOARD BOLTS



Style 5421
Polished, cast brass; friction screw adjustment.

| Nos. | Size, Inches | Per Dozen |
|------|---------------|-----------|
| 2761 | 2 x 1 1/2 | \$8.80 |
| 2762 | 2 1/2 x 1 1/2 | 10.90 |
| 2763 | 3 x 1 1/2 | 13.75 |
| 2764 | 3 1/2 x 1 1/2 | 14.75 |

O.K.—NECK
Style 5423

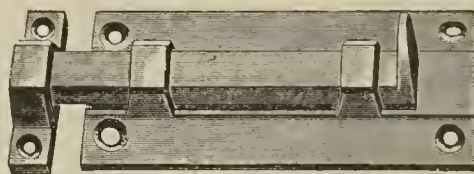
Polished, cast brass; with friction screw adjustment.



| Nos. | Size, Inches | Per Dozen |
|-------|---------------|-----------|
| 2765 | 3 1/2 x 1 1/2 | \$15.75 |
| 2766 | 4 1/2 x 1 1/2 | 24.15 |
| *2767 | 8 x 1 1/4 | 109.20 |

* Extra heavy.

SHIP BOLTS



Cast brass; polished finish; straight square bolt with brass friction spring.

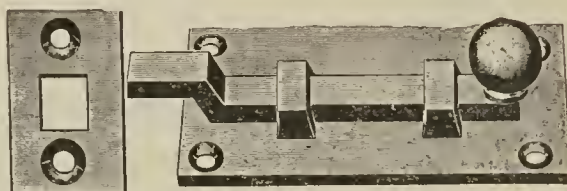
Style 5437—LIGHT PATTERN

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 10 | 2 x 1 | \$5.00 |
| 11 | 3 x 1 1/8 | 6.00 |
| 12 | 4 x 1 3/8 | 8.80 |
| 13 | 5 x 1 5/8 | 12.50 |

Style 5439—EXTRA HEAVY

| | | |
|---|---------------|---------|
| 1 | 3 x 1 3/8 | \$12.60 |
| 2 | 3 1/2 x 1 3/8 | 14.75 |
| 3 | 4 x 1 1/2 | 16.75 |
| 4 | 5 x 1 5/8 | 21.00 |
| 5 | 6 x 1 3/4 | 25.00 |
| 6 | 8 x 2 | 48.25 |
| 7 | 10 x 2 1/4 | 58.80 |
| 8 | 12 x 2 1/4 | 84.00 |

NECK BOLTS



Square offset bolts with round knobs and brass friction springs; cast brass; polished finish.

Style 5443—LIGHT PATTERN

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 7 | 3 x 1 1/4 | \$8.00 |
| 8 | 4 x 1 1/8 | 9.50 |

Style 5445—EXTRA HEAVY PATTERN

| | | |
|---|---------------|---------|
| 1 | 3 x 1 1/4 | \$15.75 |
| 2 | 3 1/2 x 1 1/2 | 17.75 |
| 3 | 4 x 1 1/2 | 19.90 |
| 4 | 5 x 1 3/4 | 25.00 |
| 5 | 6 x 1 3/4 | 33.50 |
| 6 | 8 x 2 | 56.00 |

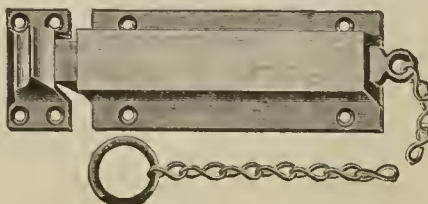
FLUSH BOLTS



Made of cast bronze, polished finish; with spring lever; furnished with strikes.

| Size, Inches | Weight per Dozen, Lbs. | Per Dozen | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|--------------|------------------------|-----------|--------------|------------------------|-----------|
| 4 x 5/8 | 2 | \$12.00 | 9 x 5/8 | 4 1/2 | \$16.80 |
| 5 x 5/8 | 2 1/4 | 12.00 | 12 x 5/8 | 6 1/4 | 19.20 |
| 6 x 5/8 | 3 1/2 | 14.40 | | | |

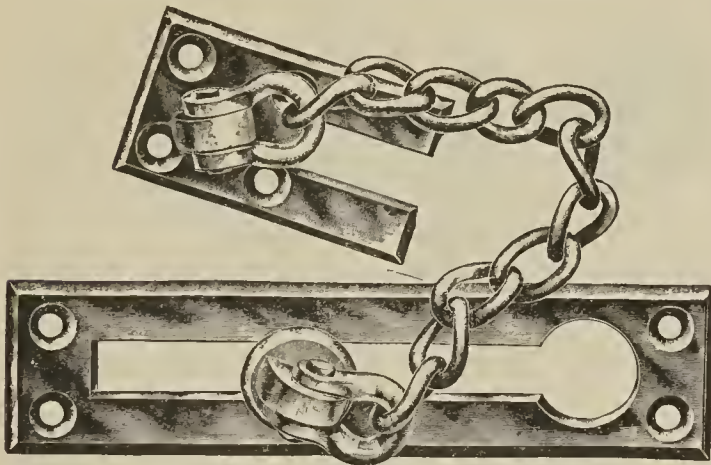
CHAIN BOLTS



Polished cast brass or bronze. For light doors and casement windows. Regularly supplied with rim strikes but flat strikes can be furnished.

| Nos. | Length, Inches | Width, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|----------------|---------------|------------------------|-----------|
| 674A | 3 | 1 3/4 | 4 3/4 | \$15.60 |
| 675B | 4 | 1 1/8 | 5 1/2 | 16.80 |

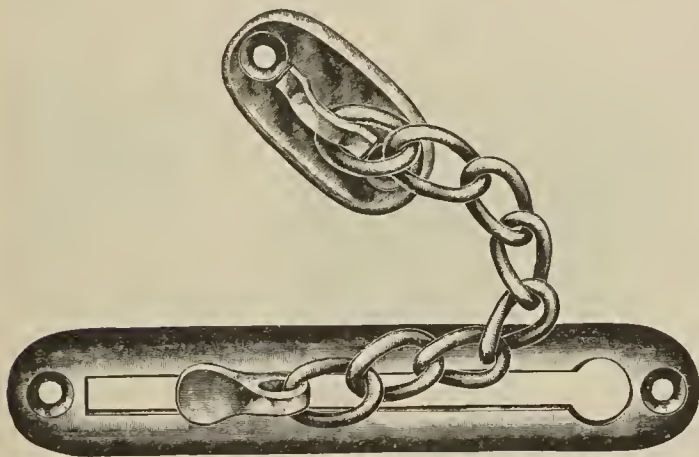
CHAIN DOOR FASTENERS



Heavy cast bronze, polished finish. Size of slide plate, $5\frac{1}{4} \times 1\frac{1}{8}$ inches. Size of anchor plate, $2\frac{1}{4} \times 1\frac{1}{8}$ inches, solid link chain, about 6 inches long is shackled to anchor plate and anchor is fastened with shackle to chain.

Per Dozen

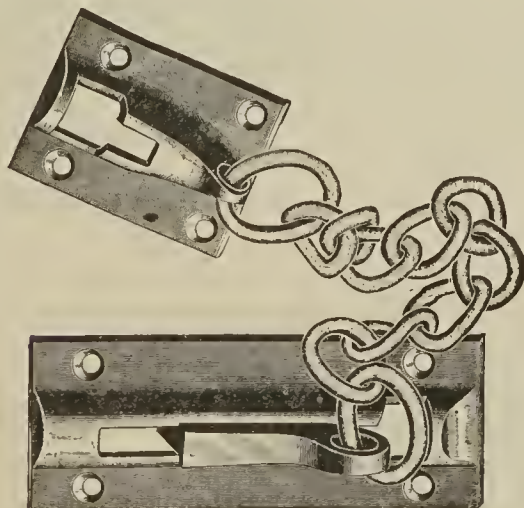
No. 628—Weight per Dozen, 6 Lbs.....\$30.00
Six in a Box with Screws



Cast bronze, polished finish; size of slide plate, $5\frac{1}{4} \times 1$ inches; size of anchor plate, $1\frac{1}{8} \times 1$ inch; solid link chain is about $5\frac{1}{2}$ inches long.

Per Dozen

No. 629—Weight per Dozen, 5 Lbs.\$14.40
Twelve in a Box with Screws



Cast bronze, polished or dull brass finished; size of slide plate, $3\frac{3}{8} \times 1\frac{1}{8}$ inches; anchor plate, $1\frac{3}{4} \times 1\frac{1}{8}$ inches; solid link chain with long sliding anchor; chain is 6 inch long.

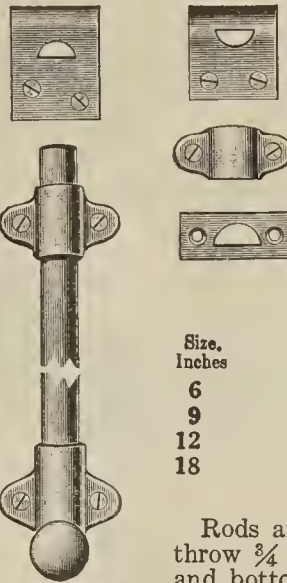
Per Dozen

No. 630—Weight per Dozen, 5 Lbs.....\$18.00
Twelve in a Box with Screws

SURFACE BOLTS

No. 367

Wrought brass, polished or dull brass finish, surface bolts; practically unbreakable; suitable for doors opening in or out. Rods are of half-round brass, $\frac{1}{2} \times \frac{1}{4}$ inch; throw, $\frac{7}{8}$ inch. Furnished complete with top and bottom guides, size, $1\frac{1}{2} \times 1$ inches; universal strike, angle strike and flat strike size $1\frac{1}{2} \times \frac{5}{8}$ inches; screws furnished. Round knob at bottom for convenience in operating.



| Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|--------------|------------------------|-----------|
| 6 | 3 | \$12.60 |
| 9 | 4 | 16.08 |
| 12 | 8 | 18.24 |
| 18 | 10 $\frac{3}{4}$ | 21.84 |

No. 366

Rods are half-round brass, $\frac{3}{8} \times \frac{3}{16}$ inch; throw $\frac{3}{4}$ inch. Furnished complete with top and bottom guides, size $1\frac{3}{4} \times \frac{5}{8}$ inches, universal strike, angle strike and flat strike size, $1\frac{1}{2} \times \frac{1}{16}$ inches; screws furnished. Round knob at bottom for convenience in operating.

| Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|--------------|------------------------|-----------|
| 3 | 2 $\frac{1}{4}$ | \$7.08 |
| 4 | 2 $\frac{1}{2}$ | 7.80 |
| 6 | 2 $\frac{7}{8}$ | 9.00 |
| 9 | 3 $\frac{1}{2}$ | 11.88 |

CHEST CORNERS

CAST BRASS

Style 5821

Cast brass, polished; with ornamental edge. Holes drilled and counter-sunk for flat head screws.

Per Dozen

No. 13—Size, $2\frac{1}{2} \times \frac{7}{8}$ Inches;
Weight per Dozen, $2\frac{1}{4}$ Lbs.... \$7.50

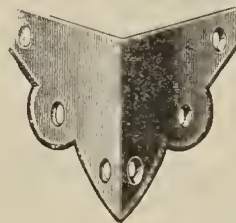


Style 5823

Cast brass; highly polished; with ornamental edges. Holes drilled and countersunk for flat head screws.

Per Dozen

No. 14—Size, $2\frac{1}{2} \times 2\frac{1}{2}$ Inches;
Weight per Dozen, $2\frac{1}{2}$ Lbs..... \$7.50

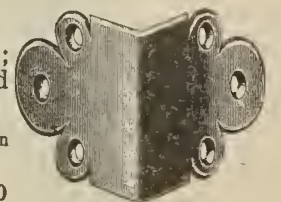


Style 5825

Cast brass; highly polished finish; ornamental edges. Holes drilled and countersunk for flat head screws.

Per Dozen

No. 15—Size, $2\frac{1}{2} \times 2\frac{1}{2}$ Inches;
Weight per Dozen, $2\frac{1}{2}$ Lbs....\$7.50

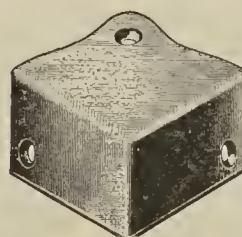


Style 5815

Cast brass; polished finish; with ornamental edge. Holes drilled and countersunk for flat head screws.

Per Dozen

No. 10—Size, $1\frac{3}{8} \times \frac{7}{8}$ Inches;
Weight per Dozen, $1\frac{1}{8}$ Lbs.....\$4.10



Style 5817

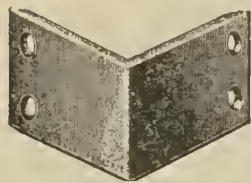
Cast brass; highly polished; with ornamental edges. Holes drilled and countersunk for flat head screws.

Per Dozen

No. 11—Size, $1\frac{1}{2} \times 1\frac{1}{2}$ Inches;
Weight per Dozen, $1\frac{1}{4}$ Lbs.....\$3.20



CHEST CORNERS



CAST BRASS

Cast brass; highly polished natural brass finish; with straight edges. Holes drilled and countersunk for flat head screws.

Per Dozen

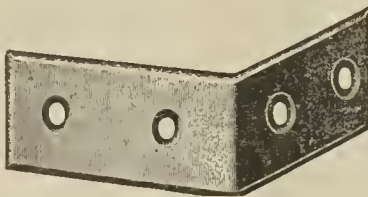
No. 12—Size, $1\frac{1}{2}$ x 1 Inch;
Weight per Dozen, 1 Lb. \$3.20

CORNER STRAPS

WROUGHT BRASS

Wrought
countersunk.

| No. | Size, Inches | Weight per Dozen, Lb | Per Dozen |
|-----|--------------------------------|-------------------------|--------------|
| 523 | $1\frac{1}{2}$ x $\frac{5}{8}$ | $\frac{3}{8}$ | \$1.75 |
| 524 | $1\frac{1}{8}$ x $\frac{3}{4}$ | $\frac{5}{8}$ | 2.05 |



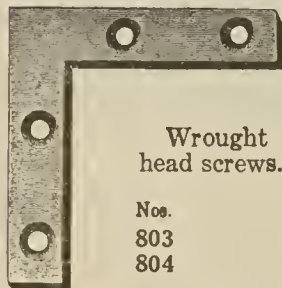
CORNER PLATES

WROUGHT BRASS

Style 5829

Wrought brass; holes countersunk for flat head screws.

| No. | Size, Inches | Weight per Gross, Lbs. | Per Gross |
|-----|--------------------------------|---------------------------|--------------|
| 803 | $2\frac{1}{2}$ x $\frac{5}{8}$ | $6\frac{1}{4}$ | \$14.67 |
| 804 | $3\frac{1}{2}$ x $\frac{3}{4}$ | 15 | 22.68 |



CORNER BRACES

WROUGHT BRASS

Style 5831

Wrought brass; holes countersunk for flat head screws.

| No. | Size, Inches | Weight per Gross, Lbs. | Per Gross |
|-----|--------------------------------|---------------------------|--------------|
| 705 | $\frac{3}{4}$ x $\frac{1}{2}$ | $1\frac{3}{4}$ | \$4.60 |
| 706 | 1 x $\frac{1}{2}$ | $2\frac{3}{4}$ | 5.60 |
| 707 | $1\frac{1}{2}$ x $\frac{1}{2}$ | 4 | 7.68 |
| 708 | 2 x $\frac{1}{2}$ | 5 | 8.20 |



CAST BRASS

Cast brass; highly polished, natural color brass finish. Holes countersunk for flat head screws.

Heavy—Style 5833

| No. | Size, Inches | Per Dozen |
|-----|---------------------------------|-----------|
| 10 | $1\frac{1}{4}$ x $1\frac{1}{2}$ | \$2.40 |
| 11 | $1\frac{3}{4}$ x $1\frac{1}{2}$ | 3.60 |
| 12 | $2\frac{1}{4}$ x $\frac{5}{8}$ | 4.35 |
| 13 | $2\frac{3}{4}$ x $\frac{5}{8}$ | 5.40 |
| 14 | $3\frac{1}{2}$ x $\frac{5}{8}$ | 6.60 |

Extra Heavy—Style 5835

| No. | Size, Inches | Per Dozen |
|-----|---------------------------------|-----------|
| 15 | $2\frac{1}{2}$ x $1\frac{1}{8}$ | \$11.35 |
| 16 | 3 x $1\frac{1}{4}$ | 16.51 |
| 17 | 4 x $1\frac{1}{2}$ | 30.96 |



WROUGHT IRON

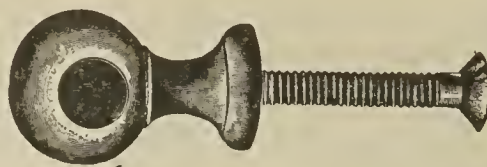
No. 5837

Wrought iron; hot galvanized finished. Holes countersunk for flat head screws.

| Size, Inches | Weight per Dozen, Lbs | Per Dozen |
|--|-----------------------|-----------|
| $2\frac{1}{2}$ x $\frac{5}{8}$ x $\frac{1}{8}$ | $1\frac{3}{8}$ | \$1.00 |
| 3 x $\frac{3}{4}$ x $\frac{1}{8}$ | $2\frac{5}{8}$ | 1.10 |
| 4 x $\frac{3}{4}$ x $\frac{1}{8}$ | $4\frac{1}{8}$ | 2.48 |
| 5 x $\frac{3}{4}$ x $\frac{1}{8}$ | $6\frac{1}{8}$ | 2.75 |
| 6 x $\frac{3}{4}$ x $\frac{1}{8}$ | $7\frac{1}{2}$ | 3.25 |



HANDLE KNOBS



Cast brass, polished. Drilled for $\frac{1}{8}$ inch rail, and with machine screw fastening.

Per Dozen

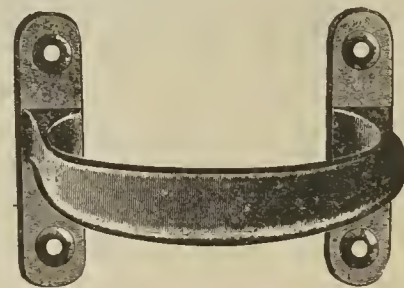
No. 5705—For $\frac{1}{8}$ Inch Rail; Height to Center of Rail. $1\frac{1}{8}$ Inches. \$5.46

SLIDING DOOR HANDLES

Style 5701

Cast brass, polished. Solid grip with heavy strap ends.

| No. | Size, Inches | Per Dozen |
|-----|-----------------|--------------|
| 1 | 4 | \$26.25 |
| 2 | $6\frac{1}{2}$ | 63.00 |



SLIDING DOOR PULLS

FLUSH

Style 5651

Heavy cast brass, polished finish. Edge of face is beveled.



| No. | Size, Inches | Weight per Dozen, Lbs | Per Dozen |
|-----|---------------------------------|--------------------------|--------------|
| o09 | $3\frac{1}{8}$ x $1\frac{3}{4}$ | $3\frac{1}{8}$ | \$11.55 |
| o10 | $4\frac{1}{8}$ x $3\frac{3}{8}$ | $4\frac{5}{8}$ | 19.95 |

DROP DRAWER PULLS

CAST BRONZE

Cast bronze polished finish; beaded edge plate with solid brass round grip handle. Fastened from back with machine screws.



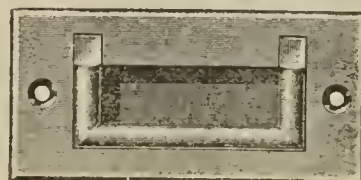
Per Dozen

No. 2934—Size Plate, 3 x $1\frac{1}{8}$; Hand Openings, $2\frac{1}{8}$ Inches \$18.00

FLUSH DRAWER PULLS

Style 5673

Cast brass; beveled edge plate with round pattern handle. Polished finish.



| No. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|--------------------|---------------------------|--------------|
| 2931 | $1\frac{1}{2}$ x 3 | $1\frac{3}{4}$ | \$10.30 |
| 2932 | $2\frac{1}{8}$ x 4 | $2\frac{3}{4}$ | 18.60 |

CAST BRASS FLUSH TRAP DOOR
PULL

POLISHED



Fig. 5647

No. 2906—Size of Plate, 4x1½ Inches.....**\$16.80**

BRASS DRAWER KNOBS

SQUARE

Style 5659

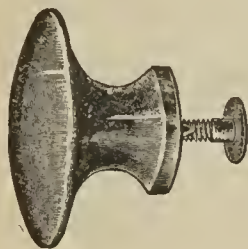
Square pattern; solid cast brass polished finish. Furnished complete with machine screw and washer.



| Nos. | Size Inch | Per Dozen |
|------|--------------|--------------|
| 1 | ⅞ | \$6.20 |

ROUND
Style 5663

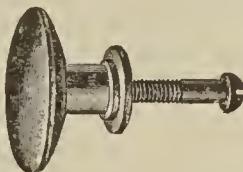
Round pattern; solid cast brass; polished finish. Furnished complete with machine screw and washer.



| Nos. | Size, Inches | Per Dozen |
|------|-----------------|--------------|
| 2920 | ¾ | \$4.30 |
| 2921 | 1 | 5.60 |
| 2922 | 1⅛ | 6.45 |
| 2923 | 1¼ | 8.20 |

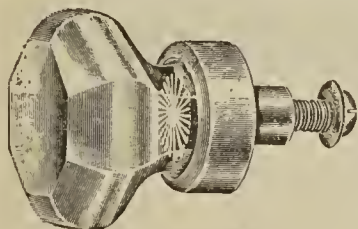
OVAL
Style 5665

Oval pattern; solid cast brass, polished finish. Furnished complete with machine screw and washer.



| Nos. | Size, Inches | Per Dozen |
|------|-----------------|--------------|
| 2924 | ⅞ | \$4.30 |
| 2925 | 1⅛ | 6.45 |
| 2926 | 1⅜ | 8.20 |

GLASS DRAWER KNOBS



Octagon pressed glass knob with mirror backing; cast brass metal spun shank with washer head screw. Screws are 10-24 thread, ⅞ inch long but can be furnished any length.

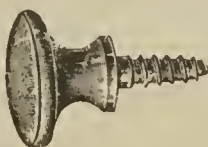
| Nos. | Size, Inches | Weight per Dozen, Ozs. | Per Dozen |
|------|-----------------|---------------------------|--------------|
| 1501 | 1 | 13 | \$7.20 |
| 1502 | 1¼ | 20 | 8.00 |
| 1503 | 1⅝ | 23 | 8.60 |

Twelve in a Box

SHUTTER KNOBS

Style 5661

Round pattern; made of solid cast brass; polished finish; wood screw is cast integral with knob.



| Nos. | Size, Inch | Per Dozen | Nos. | Size, Inches | Per Dozen |
|------|---------------|--------------|------|-----------------|--------------|
| 2914 | ½ | \$1.68 | 2917 | 1 | \$3.06 |
| 2915 | ⅝ | 2.04 | 2918 | 1⅛ | 4.22 |
| 2916 | ¾ | 2.52 | 2919 | 1¼ | 5.04 |

DRAWER PULLS



Style 5679

Cast brass bar pulls, round pattern, with polished finish. Fastened from back with machine screws.

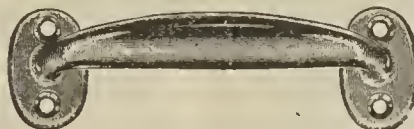
No. 417—Size, 4 Inches; Weight per Dozen, 1⅜ Lbs. **\$11.35**



Style 5681

Cast brass bar pulls, square pattern with polished finish. Fastened from back with machine screws.

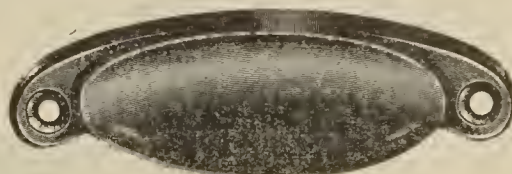
No. 5—Size, 4 Inches; Weight per Dozen, 1¼ Lbs. **\$4.80**



Style 5671

Heavy pattern cast bronze bar pull, polished finish.

No. 2930—Size, 3¼ Inches; Weight per Dozen, 4½ Lbs. **\$10.35**



Style 5669

Cast brass in a neat bevel edge design. Polished brass finish.

No. 3—Size, 3¼ Inches.....**\$6.20**



Style 5667

Cast brass, polished finish.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 2927 | 3 | \$4.56 |
| 2928 | 4 | 4.80 |



Style 5675

Wrought brass, polished finish.

No. 2933—Size, 3¼ Inches **\$2.00**

BAR SASH LIFTS



Style 5693

Cast brass, polished finish; with solid formed grip. Per Dozen

No. 20—Size, 1 $\frac{3}{8}$ x5 Inches; Weight per Dozen, 2 $\frac{1}{4}$ Lbs.\$6.50

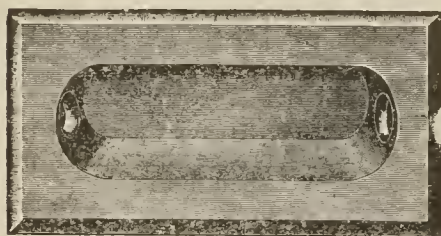


Style 5691

Cast brass, polished finish. Popular pattern; solid grip. Per Dozen

No. 10—Size, 1 $\frac{3}{8}$ x4 $\frac{7}{8}$ Inches; Weight per Dozen, 2 $\frac{3}{8}$ Lbs.\$6.60

FLUSH SASH LIFTS



Style 5649

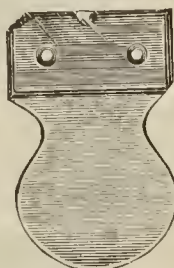
Cast brass, polished finish; standard type with deep recess; edge of plate beveled.

| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|--------------------|------------------------|-----------|
| 2907 | 2 $\frac{3}{4}$ x1 | 2 $\frac{1}{4}$ | \$9.30 |
| 2908 | 3 x1 $\frac{3}{4}$ | 2 $\frac{3}{4}$ | 11.35 |

LEATHER SASH LIFTS

Selected, tan leather lift with cast brass plates 1 $\frac{3}{4}$ x $\frac{7}{8}$ inches.

No. M546Each \$1.25



FLUSH SASH PULLS

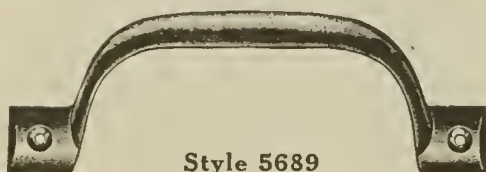


No. 819

Cast brass; polished natural bronze finish, with loose bronze pull.

| Size, Plate Inches | Per Dozen |
|--------------------|-----------|
| 4x1 | \$15.48 |
| 5x1 $\frac{1}{2}$ | 23.72 |
| 6x2 | 30.95 |

BOX PULLS

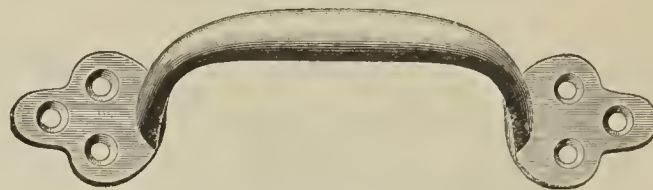


Style 5689

Light pattern, cast brass, polished finish box pulls, with solid grip.

No. 365—Size, 3 $\frac{1}{2}$ Inches.....Per Gross \$27.00

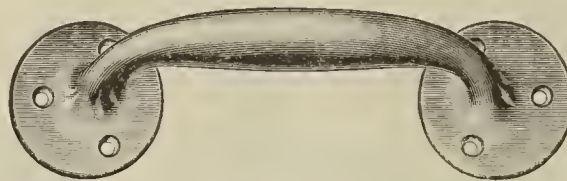
DOOR PULLS



Style 5697

Cast brass, regular pattern; solid back grip. Polished finish.

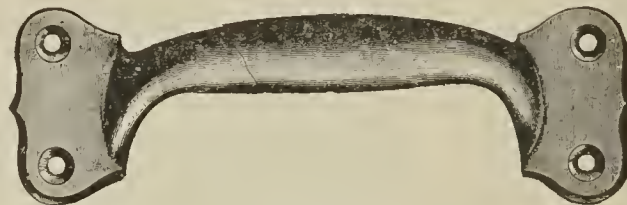
| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|-----------------|------------------------|-----------|
| 375 | 5 $\frac{3}{4}$ | 3 | \$4.32 |
| 376 | 6 $\frac{1}{4}$ | 3 $\frac{1}{2}$ | 6.48 |
| 377 | 7 | 4 $\frac{1}{4}$ | 8.60 |



Style 5699

Cast brass, heavy pattern door pull, with full grip; polished finish.

No. 2937—Size, 7 Inches; Weight per Dozen, 8 $\frac{1}{4}$ Lbs.Each \$2.00

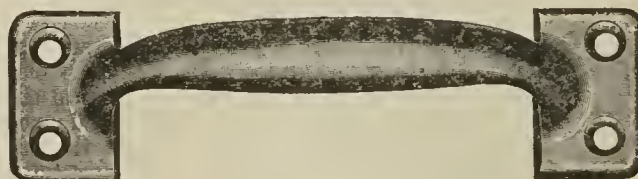


Style 5703

Polished cast brass or cast iron hot galvanized. Nos. 355 and 385 have hollow back grips. Number 385D is extra heavy pattern with solid back grips. No. 4251 is cast iron, hot galvanized.

| Nos. | Material | Size, Inches | Per Dozen |
|-------|----------------------|-----------------|-----------|
| 355 | Polished Brass | 4 $\frac{1}{4}$ | \$5.40 |
| 385 | Polished Brass | 6 | 7.20 |
| *385D | Polished Brass | 6 | 12.60 |
| 4251 | Galvanized Cast Iron | 6 | 4.60 |

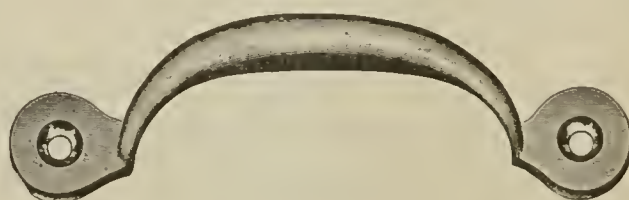
*Solid back



Style 5695

Cast brass, polished; medium pattern door pull with solid back grip.

No. 380—Size, 5 Inches; Weight per Dozen, 3 $\frac{1}{4}$ Lbs..Per Dozen \$5.40



Style 5683

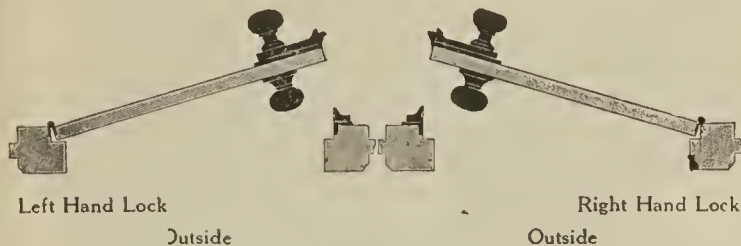
Light pattern, for screen and pantry doors. Cast brass, polished finish.

No. 350—Size, 4 $\frac{3}{8}$ Inches; Weight per Dozen, 1 $\frac{3}{4}$ Lbs.Per Dozen \$3.50

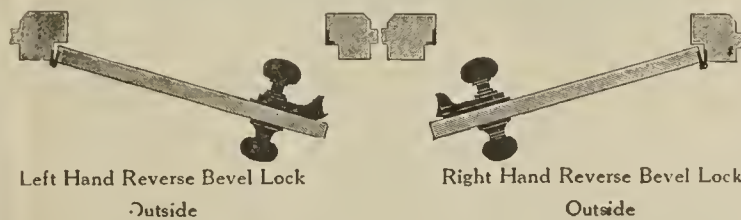
HAND OF LOCKS

TIEBOUT

Inboard



Outboard



Always specify the hand of the lock wanted, not the hand of the door

The hand of a door is determined from the OUTSIDE except French doors, on which the hand is taken from INSIDE, when cremone bolts or casement fasteners are used.

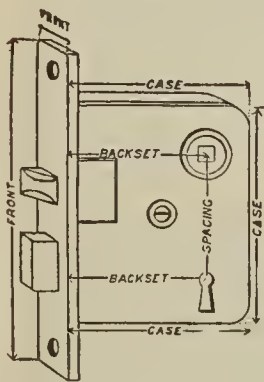
Standing outside the door, if the butts are on the right, it is a right-hand door; if on the left it is a left-hand door.

If, when standing outside, the door opens from you, or inward, it takes a lock with regular bevel latch bolt; if it opens towards you, or outward, it takes a lock with a reverse bevel latch bolt.

Reversible locks can be used on doors of either hand except when door is beveled, then hand of door must be given.

HOW TO MEASURE LOCKS

BIT KEY LOCK



Size of Case—Measurement is taken overall.

Front—The front, or face of lock, is measured full width or length.

Backset—Distance from front of lock to center of hub or center of keyhole; the backset of a rabbeted lock is taken from both sides.

Spacing—Distance from center of hub to center of keyhole.

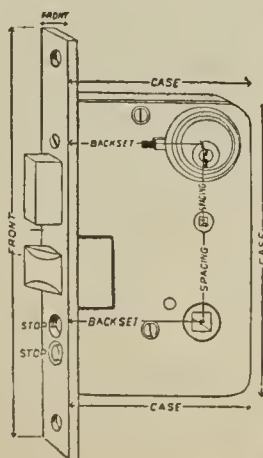
CYLINDER LOCK

Size of Case—Measurement is taken overall.

Front—The front or face of lock is measured full width or length.

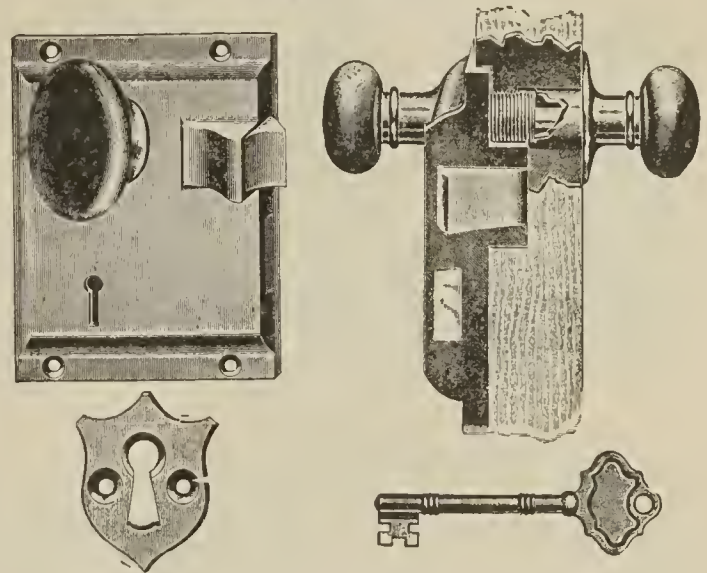
Backset—Distance from front of lock to center of hub or center of cylinder. The backset of a rabbeted lock is taken from both sides.

Spacing—Distance from center of knob hub to center of cylinder on outside, and from center of knob hub to center of thumb piece on inside.



CABIN RIM LOCK SETS

CAST BRONZE



Style 5001

BIT KEY—UPRIGHT RIM LOCK

Lock—Cast bronze case, $5\frac{3}{8} \times 4$ inches; backset $2\frac{3}{4}$ inches. Furnished for either right or left hand of doors, plain or reverse bevel, knobs oval. Loose outside knob screws through the door and on to the body of the lock, fitting doors $1\frac{1}{4}$ to 2 inches thick. The knuckle latch prevents rattling, also injury to the lock by slamming the door. Two cast brass keys furnished. A box keeper is furnished with inboard locks to give lock a symmetrical appearance when the door is closed. A flat keeper or combination escutcheon can be supplied if specified. Key plate, polished bronze, shield design.

Made in 50 key changes; master and extra keys can be furnished to order.

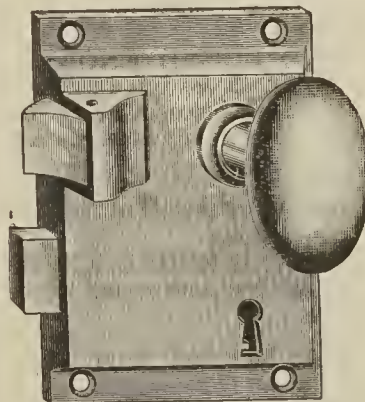
POLISHED FINISH

| Set Nos. | Description | Per Set |
|----------|--------------------------|---------|
| 2201 | Right Hand Plain Bevel | \$19.75 |
| 2202 | Right Hand Reverse Bevel | 19.75 |
| 2203 | Left Hand Plain Bevel | 19.75 |
| 2204 | Left Hand Reverse Bevel | 19.75 |

One Set in a Box with Screws

Note—Illustration shows right hand reverse bevel lock.

CABIN RIM LOCK SETS

CAST BRONZE
BIT KEY

Lock—Cast bronze case, $5 \times 3\frac{3}{8}$ inches; polished finish. Backset, $2\frac{1}{2}$ inches. Furnished for either right or left hand of doors, plain or reverse bevel. The knuckle latch prevents rattling, also injury to the lock by slamming the door. A box keeper is furnished with inboard locks, but a flat keeper is supplied with outboard locks; with two keys.

Trim—Polished finish; oval, $2\frac{3}{8}$ inch solid knobs, $\frac{3}{8}$ inch spindle; combination escutcheon with attached knob.

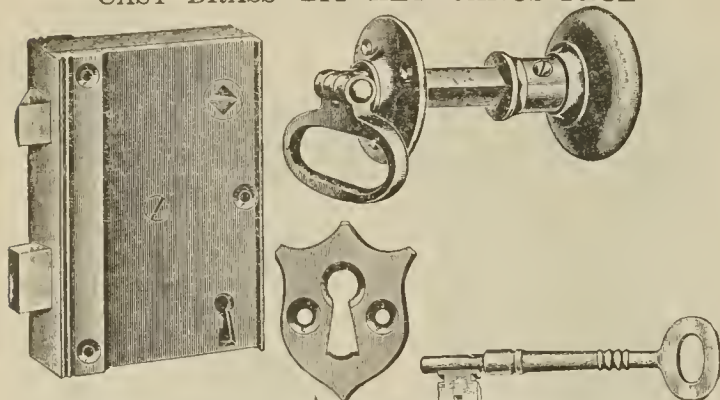
POLISHED FINISH

| Nos. | Description | Per Set |
|------|--------------------------|---------|
| 650A | Right Hand Plain Bevel | \$17.00 |
| 650B | Right Hand Reverse Bevel | 17.00 |
| 650C | Left Hand Plain Bevel | 17.00 |
| 650D | Left Hand Reverse Bevel | 17.00 |

One Set in a Box with Screws

Note—Illustration shows left hand reverse bevel.

RIM KNOB LOCK SETS
CAST BRASS—BIT KEY—JANUS FACE



Style 5021

SHIELD KEY ESCUTCHEON,
ROUND KNOB AND DROP HANDLE

Lock—Emery finish, all brass case with reversible latch bolt, 4x3¼ inches; backset, 2⅞ inches. Regularly furnished with brass nosing, but flat striking plate can be supplied.

Trim—Polished finish; round knob and drop handle, 2½ inches with ⅜ inch spindle. With one key; extra keys furnished to order. Shield key escutcheons.

Per Set

No. 113½B—Emery Finished Lock; Polished Trim..\$7.25

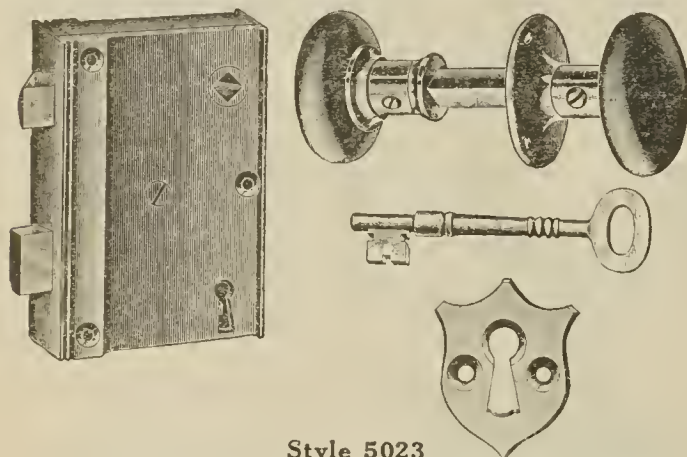
Style 5019

COMBINATION ESCUTCHEON,
ROUND KNOB AND DROP HANDLE

Consists of the No. 113½B lock set, but with combination escutcheon in place of key escutcheon.

Per Set

No. 113½A—Emery Finish Lock; Polished Trim..\$8.00



Style 5023

SHIELD ESCUTCHEON AND ROUND KNOBS

Consists of the above No. 113½B lock set but furnished with two 2½ inch round brass knobs in place of knob and drop handle, and key escutcheon in place of combination escutcheon.

Per Set

No. 113½C—Emery Finished Lock; Polished Trim..\$7.25

No. 113½D—Style 5024

COMBINATION ESCUTCHEON AND ROUND KNOBS

Consists of the No. 113½B lock set, but with round knobs in place of knob and drop handle.

Per Set

No. 113½D—Emery Finish Lock; Polished Trim..\$8.00

No. 113½F

SHIELD ESCUTCHEON AND OVAL KNOBS

Consists of the No. 113½C lock set, but furnished with 2⅝ inch oval knobs in place of round knobs.

Per Set

No. 113½F—Emery Finished Lock; Polished Trim..\$7.25

No. 113½G

COMBINATION ESCUTCHEON AND OVAL KNOBS

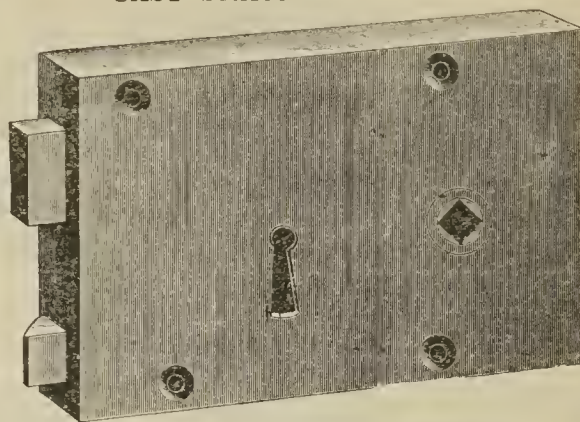
Consists of the No. 113½B lock set, but furnished with 2⅝ inch oval knobs in place of round knobs.

Per Set

No. 113½G—Emery Finished Lock; Polished Trim..\$8.00

One Set in a Box with Screws

SHIP RIM KNOB LOCKS
CAST BRASS—JANUS FACE



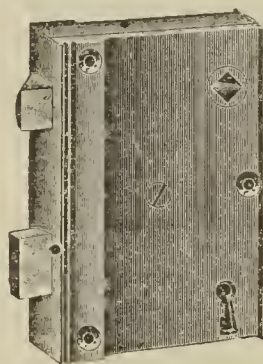
HORIZONTAL—BIT KEY

Style 5077

Heavy cast brass case, 5x3¼ inches, with reversible latch bolt. Furnished with flat striking plate or nosing, the striking plate being furnished only when specified. One brass bit key with each lock; extra keys furnished to order; ⅝ inch spindle hub.

Each

No. 20—Emery Finish\$5.75



Style 5061

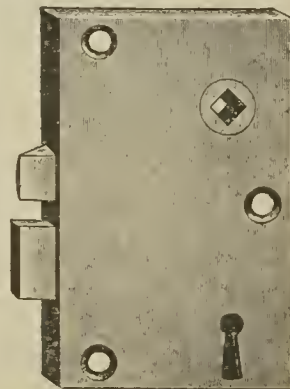
All brass case; with reversible latch bolts for right and left hand doors. Furnished with flat striking plate or with nosing. The nosing is furnished regularly unless otherwise ordered. One brass bit key with each lock; extra keys can be furnished on order.

EMERY FINISH

| Nos. | Size Case, Inches | Size Spindle, Inch | Back Set, Inches | Per Dozen |
|------|-------------------|--------------------|------------------|-----------|
| 10 | 4 x3 | ⅝ | 2⅜ | \$39.60 |
| 11 | 5 x3¼ | ⅝ | 2 | 60.00 |
| 13 | 4 x3¼ | ⅝ | 2⅞ | 44.40 |
| 13½ | 4 x3¼ | ⅝ | 2⅞ | 44.40 |
| 14 | 4½x3¾ | ⅝ | 2¾ | 61.80 |

Style 5059

All brass case, with reversible latch bolt for right and left hand doors. Furnished with either nosings or flat striking plates; nosings furnished unless otherwise specified. One brass bit key with each lock; extra keys furnished on order.



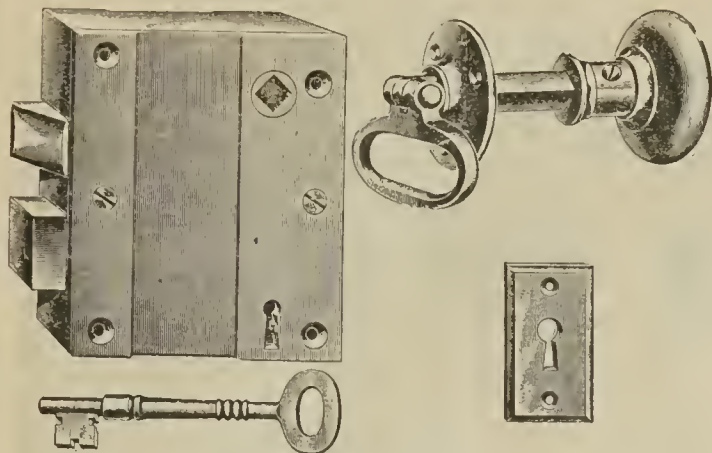
| Nos. | Size Case, Inches | Finish | Size Spindle, Inch | Back Set, Inches | Per Dozen |
|------|-------------------|----------|--------------------|------------------|-----------|
| 15 | 3¾x3 | Emery | ⅝ | 2¼ | \$36.66 |
| 16 | 3¾x2½ | Polished | ⅝ | 1⅝ | 39.00 |
| 17 | 2½x2 | Polished | ⅝ | 1½ | 38.12 |

Note—Above illustrations show right hand locks.

Any of these locks can be furnished in sets, as on preceding page.

All Above, Six in a Box

RIM KNOB LOCK SETS



CAST BRASS—JANUS FACE—BIT KEY
Style 5015

Lock—Cast brass case, emery finished, $4\frac{1}{2} \times 3\frac{3}{4}$ inches; backset, $2\frac{3}{4}$ inches, with reversible latch bolt for right and left hand doors. With flat brass striking plates or cast nosings, the nosings being regularly supplied unless otherwise ordered.

Trim— $2\frac{1}{8}$ inch round brass knob with heavy cast brass drop handle and $\frac{3}{8}$ inch brass spindle; cast brass rose; polished finish. Key plate escutcheon, cast brass, polished, $2\frac{1}{2} \times 1\frac{1}{2}$ inches. With one brass bit key. Extra keys or master keyed locks furnished on order.

No. 2011 \$12.75

One Set in a Box with Screws

RIM KNOB LOCKS

JANUS FACE—BIT KEY

CAST BRASS
Style 5063

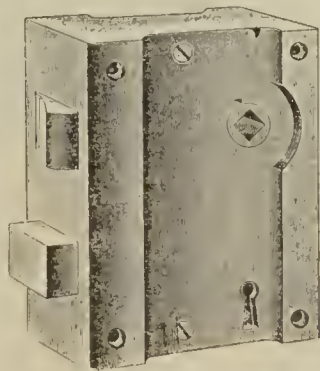
For use on iron doors. Extra heavy cast brass case, $4\frac{1}{2} \times 3\frac{3}{4}$ inches with $2\frac{3}{4}$ inches backset. Emery finished. Reversible latch bolt. Furnished with heavy cast brass nosing, four brass bolts, $2 \times \frac{1}{8}$ inches, and two machine screws. One brass bit key with each lock. Extra keys furnished on order; $\frac{3}{8}$ inch spindle hub.

Each

No. 18 \$10.25

Style 5065

For use on iron and extra heavy wood doors. Extra heavy cast bronze case, $4\frac{5}{8} \times 3\frac{3}{4}$ inches; emery finished. Reversible, anti-friction latch bolt with flat striking plate or with nosing; striking plate being furnished on order. Four bolts, $\frac{1}{2} \times 2$ inches, and two machine screws are furnished with each lock. Two brass bit keys with each lock; extra keys furnished to order; $\frac{3}{8}$ inch hub spindle.



Each

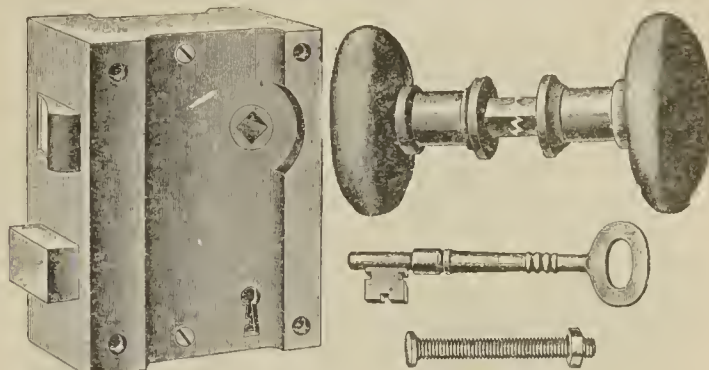
No. 2241 \$11.00

SPECIAL HARDWARE

We would suggest that before having any special hardware or patterns made, to take this matter up with us to see if we do not carry in stock or have patterns for the desired articles that can be used.

RIM KNOB LOCK SETS

CAST BRONZE—JANUS FACE



VERTICAL—BIT KEY
Style 5011

Extra heavy lock designed for use on steel doors.

Lock—Has swinging knuckle, anti-friction latch, heavy bronze bolt and is reversible for right and left hand doors. Furnished with two brass keys; cast bronze case, $4\frac{5}{8} \times 3\frac{3}{4}$ inches; backset, $2\frac{3}{4}$ inches.

Trim—Oval brass knobs, $2\frac{3}{4} \times 1\frac{3}{4}$ inches; $\frac{3}{8}$ inch spindle.

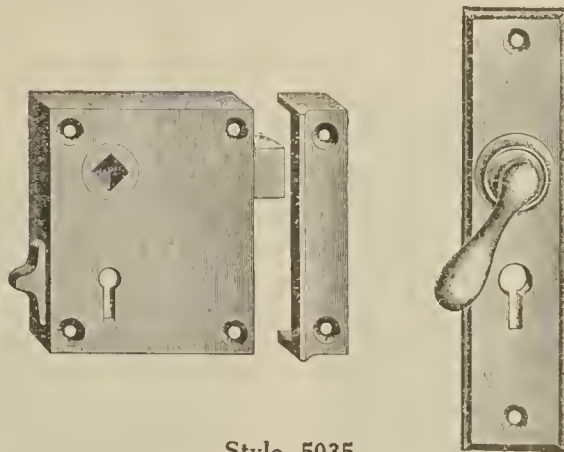
Per Set

No. 2219—Emery Finish \$19.50

One Set in a Box with Bolts

SCREEN DOOR LOCK SETS

CAST BRASS—JANUS FACE

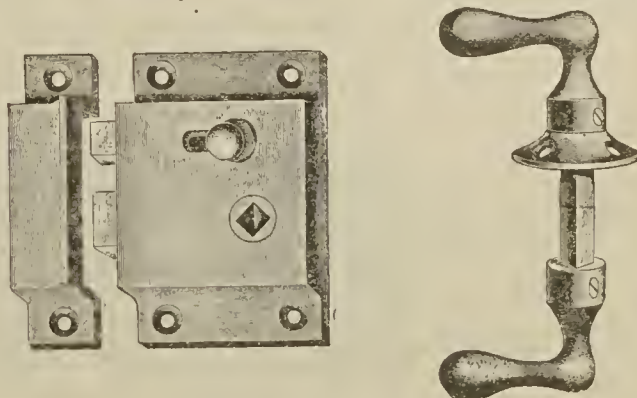


Style 5035

Reversible surface lock, $2\frac{1}{2} \times 2\frac{1}{8}$ inches, $1\frac{1}{2}$ inches backset; with slide stop for locking inside. Unlocked by key from the outside; combination escutcheon, $4\frac{1}{2} \times 1$ inches; lever handles, $1\frac{3}{4}$ inches; $\frac{1}{8}$ inch spindle. With one key.

Per Set

No. 2224—Emery Finish \$6.00



BRONZE—LATCH SET
Style 5039

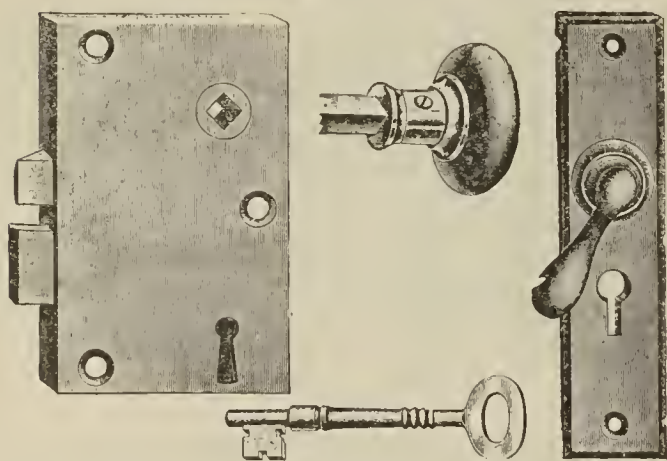
Flanged rim latch, $3\frac{1}{8} \times 2$ inches with slide bolt; for right or left hand as ordered; cast bronze lever handles, $1\frac{1}{2}$ inches with $1\frac{1}{8}$ inch diameter rose. Adjustable for doors $\frac{3}{4}$ to $1\frac{1}{4}$ inches.

Per Set

No. 2226—Emery Finish \$6.00

RIM KNOB LOCK SETS

CAST BRASS—JANUS FACE

BIT KEY
Style 5027

Lock—Cast brass case, $3\frac{3}{4} \times 2\frac{1}{2}$ inches; backset, $1\frac{5}{8}$ inches. Reversible latch bolt. Furnished with flat striking plates or cast brass nosings. The nosings are furnished unless otherwise specified.

Knob— $1\frac{3}{4}$ inch; solid; $\frac{1}{8}$ inch spindle; escutcheon cast brass, with $1\frac{3}{4}$ inch lever handle; $5\frac{1}{2} \times 1\frac{1}{2}$ inches.

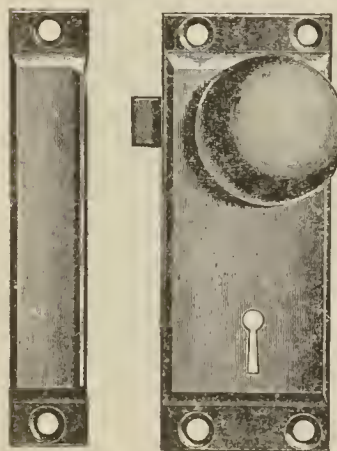
Furnished with one brass key; extra keys can be furnished to order.

Per Set

No. 161 $\frac{1}{2}$ —Polished Finish.....\$6.50

One Set in a Box with Screws

CAST BRONZE—FLANGED RIM



Style 5007

For light inside doors.

Lock—All brass case, $4\frac{1}{4} \times 1\frac{7}{8}$ inches; backset, $1\frac{3}{8}$ inches. Made right and left hand.

Two brass bit keys. Extra keys can be furnished on order.

Trim—With 2 inch round knob; $\frac{1}{8}$ inch spindle. With shield key escutcheon. Furnished with flat striking plate on order only.

POLISHED FINISH

Per Set

No. 2213—Right Hand.....\$9.00

No. 2214—Left Hand.....9.00

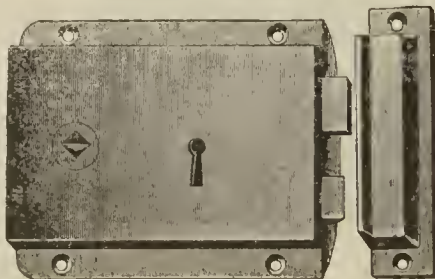
One Set in a Box with Screws

RIM KNOB LOCKS

CAST BRASS—FLANGED RIM

Style 5073

Cast brass case, made right and left hand. With cast brass nosing. Flat strike furnished on special order. One brass bit key with each lock; extra keys furnished on order. Illustration shows right hand lock.



POLISHED FINISH

Size Case,

Size Spindle,

No
25 $5\frac{1}{2} \times 4\frac{1}{2}$ $\frac{3}{8}$ Each
\$16.50

Six in a Box

Note—Any rim lock listed on this page can be made up in sets with trim as shown on the preceding page. Extra nosings and strikes can be furnished.

RIM KNOB LATCHES

CAST BRASS—FLANGED RIM

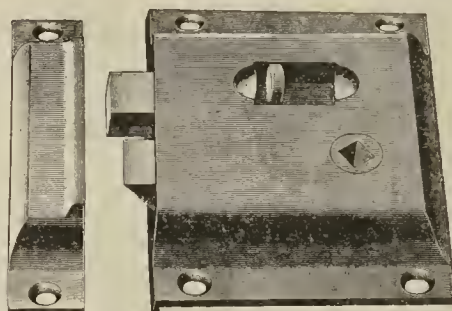
Style 5071

Cast brass case, $4 \times 3\frac{3}{4}$ inches; reversible latch bolt and recessed thumb piece with wide bolt. Cast brass nosing, $\frac{1}{8}$ inch spindle hub.

Per Dozen

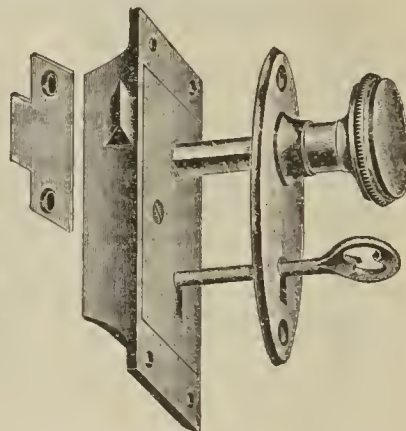
No. 42—Polished Finish.....\$52.80

Six in a Box



RIM CLOSET LATCHES

Flanged, cast brass lock, $3\frac{3}{8} \times 1\frac{1}{2}$ inches with $1\frac{1}{8}$ inch round knob and cast brass oval escutcheon, $2\frac{7}{8} \times 1\frac{1}{8}$ inches; 1 inch backset. Made in right and left hand reverse bevels. Furnished with two cast brass keys. Illustration shows right hand reverse bevel lock.



POLISHED FINISH

Per Set

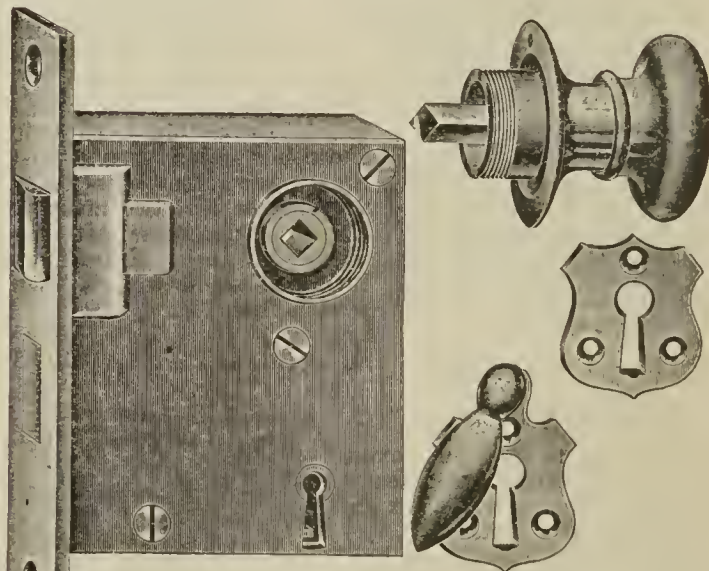
No. 2215—Right Hand Reverse Bevel.....\$6.45

No. 2216—Left Hand Reverse Bevel.....6.45

One Set in a Box with Screws

MORTISE LOCK SETS

CAST BRONZE



BIT KEY

Style 5041

Lock—Cast bronze case, $4\frac{1}{4} \times 3\frac{3}{4} \times \frac{5}{8}$ inch thick. Has reversible knuckle latch which prevents injury to lock by slamming, also prevents rattling. For doors $1\frac{3}{4}$ to 2 inches thick.

Backset—Front to center of hub and key hole, $2\frac{3}{4}$ inches. Furnished with two polished brass keys. Made in fifty changes and can be masterkeyed to order.

Trim—Round knobs, 2 inches in diameter; $\frac{1}{8}$ inch spindle. The knobs screw through the door into the lock case. Extra roses can be furnished for doors from $1\frac{1}{4}$ to $1\frac{1}{2}$ inches thick.

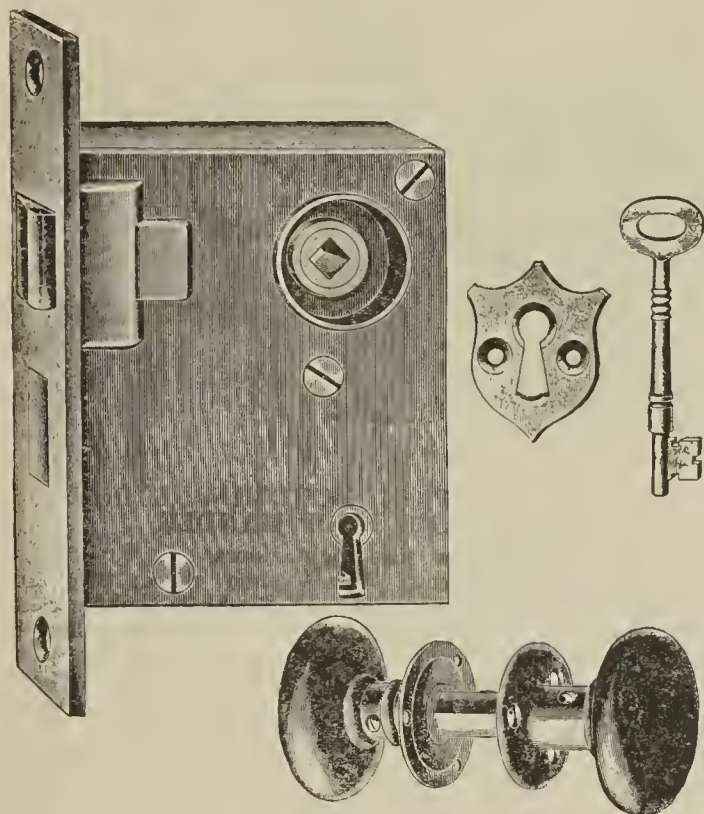
Key Escutcheons—Cast bronze shields, one each plain and with drop; polished finish.

Per Set

No. 2227—Polished Finish.....\$19.75

MORTISE LOCK SETS

CAST BRONZE



BIT KEY

Style 5043

Lock—Cast bronze case, $4\frac{1}{4} \times 3\frac{3}{4} \times \frac{5}{8}$ inch thick. Has reversible knuckle latch which prevents injury to lock by slamming door, also prevents rattling.

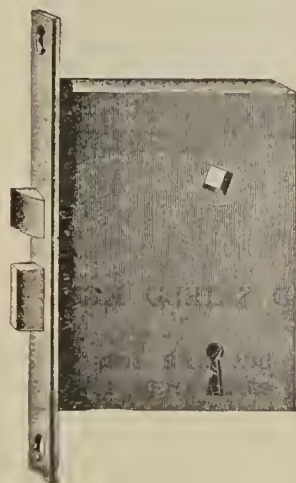
Backset—Front to center of hub and key hole, $2\frac{3}{4}$ inches.

Trim—Solid round knobs, $2\frac{3}{8}$ inches in diameter; $\frac{5}{16}$ inch brass spindle.

Key Escutcheons—Cast bronze shields. Furnished with two keys. Made in fifty changes.

No. 2228—Polished Finish Per Set \$16.00

MORTISE LOCKS



CAST BRASS

Style 5083

For inside doors. Cast brass case with reversible latch bolt. Furnished with one brass bit key. Extra keys can be furnished to order.

| No. | Size Case, Inches | Thickness, Inch | Backset, Inches | Size Front, Inches | Size Spindle Hub, Inch | Per Dozen |
|-----|------------------------------------|-----------------|-----------------|-------------------------------------|------------------------|-----------|
| 70 | $3\frac{1}{2} \times 3$ | $\frac{1}{2}$ | $2\frac{1}{4}$ | $5 \times \frac{3}{4}$ | $\frac{5}{16}$ | \$40.20 |
| 71 | $4 \times 3\frac{1}{4}$ | $\frac{1}{2}$ | $2\frac{1}{2}$ | $5\frac{5}{8} \times \frac{13}{16}$ | $\frac{5}{16}$ | 52.20 |
| 75 | 3×2 | $\frac{1}{2}$ | $\frac{1}{2}$ | $4\frac{1}{8} \times \frac{11}{16}$ | $\frac{5}{16}$ | 34.80 |
| 76 | $4\frac{3}{8} \times 3\frac{5}{8}$ | $\frac{11}{16}$ | $2\frac{3}{16}$ | $6\frac{1}{8} \times 1$ | $\frac{3}{8}$ | 66.60 |

Note—Mortise Locks listed on this page can be made up in sets with trim as shown on a preceding page of rim lock sets, Style 5019, 5021, 5023 and 5024.

Extra nosings and strikes can be furnished.

MORTISE LOCK SETS

CAST BRASS—BIT KEY



Style 5047

WITH COMBINATION ESCUTCHEONS, ROUND KNOB AND DROP HANDLE

Lock—Cast brass case, $3\frac{1}{2} \times 3 \times \frac{1}{2}$ inch thick. Reversible latch bolt. Backset, front to center of hub and key hole, $2\frac{1}{4}$ inches.

Trim—Brass round knob, 2 inches in diameter; $\frac{5}{16}$ inch spindle; combination cast brass escutcheons.

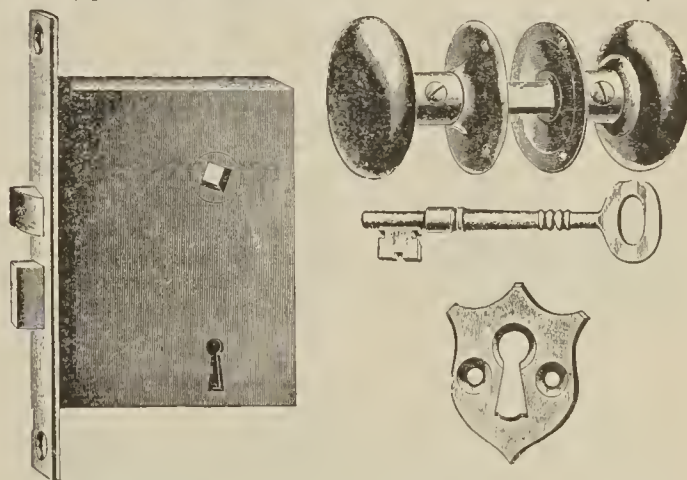
No. 170A—Polished Finish Per Set \$7.25

No. 170B

WITH SHIELD ESCUTCHEONS, ROUND KNOB AND DROP HANDLE

Consists of the above No. 170A lock set furnished with shield key escutcheons in place of combination escutcheons.

No. 170B—Polished Finish Per Set \$6.60



WITH ROUND KNOBS AND SHIELD ESCUTCHEONS

Consists of the above No. 170A lock set furnished with 2 inch round brass knobs in place of knob and drop handle and with two shield key escutcheons in place of combination escutcheon.

No. 170C—Polished Finish Per Set \$6.60

No. 170D

WITH COMBINATION ESCUTCHEONS AND ROUND KNOBS

This is the No. 170A lock set furnished with two round brass knobs in place of knob and drop handle.

No. 170D—Polished Finish Per Set \$7.25

No. 170F

WITH SHIELD ESCUTCHEONS AND OVAL KNOBS
This is the No. 170C lock set but with oval in place of round knobs.

No. 170F—Polished Finish Per Set \$7.10

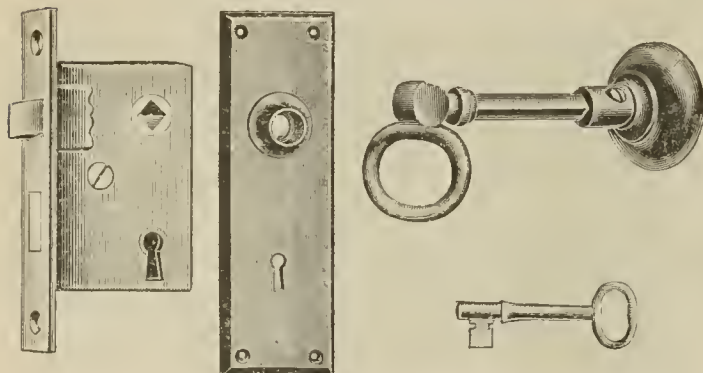
No. 170G

WITH COMBINATION ESCUTCHEONS AND OVAL KNOBS

This is the No. 170A lock set but with oval knobs in place of drop handle and knob.

No. 170G—Polished Finish Per Set \$7.85

MORTISE LOCK SETS CAST BRASS—BIT KEY



WITH COMBINATION ESCUTCHEONS, ROUND
KNOB AND RING DROP HANDLE

Especially adapted for thin, light doors with narrow stiles.

Lock—Cast brass case, $3 \times 1\frac{1}{8} \times \frac{3}{8}$ inch thick; reversible latch bolt. Size front, $\frac{1}{2} \times 4$ inches; backset, $\frac{7}{8}$ inch. With flat brass striking plate and one brass bit key. Extra keys can be furnished.

Trim— $1\frac{1}{4}$ inch round knob with heavy cast brass drop handle and $\frac{1}{8}$ inch brass spindle. Combination escutcheon plates, $1 \times 4\frac{5}{8}$ inches.

No. 169AA—Polished Finish Per Set \$8.00

No. 169G

WITH COMBINATION ESCUTCHEONS AND TWO OVAL KNOBS

Consists of a $3 \times 1\frac{1}{8} \times \frac{3}{8}$ inch reversible latch bolt; cast brass lock with $\frac{1}{2} \times 4$ inch front and $\frac{7}{8}$ inch backset—with flat brass striking plate and one brass bit key; combination $1\frac{1}{8} \times 4\frac{5}{8}$ inch escutcheon and two $1\frac{3}{8}$ inch oval brass knobs.

No. 169G—Polished Finish Per Set \$8.00

No. 169K

WITH COMBINATION ESCUTCHEONS, ROUND KNOB AND LEVER HANDLE

Consists of a $3 \times 1\frac{1}{8} \times \frac{3}{8}$ inch reversible latch bolt; cast brass lock with $\frac{1}{2} \times 4$ inch front and $\frac{7}{8}$ inch backset—with flat brass striking plate and one brass bit key; combination $1\frac{1}{8} \times 4\frac{5}{8}$ inch escutcheons and $1\frac{3}{4}$ inch round knob and lever handle.

No. 169K—Polished Finish Per Set \$8.00

No. 169P

WITH COMBINATION ESCUTCHEONS, OVAL KNOB AND LEVER HANDLE

Consists of a $3 \times 1\frac{1}{8} \times \frac{3}{8}$ inch reversible latch bolt; cast brass lock with $\frac{1}{2} \times 4$ inch front and $\frac{7}{8}$ inch backset—with flat brass striking plate and one brass bit key; combination $1\frac{1}{8} \times 4\frac{5}{8}$ inch escutcheons, $1\frac{3}{8}$ inch oval knob and lever handle.

No. 169P—Polished Finish Per Set \$8.00

No. 169R

WITH COMBINATION ESCUTCHEONS AND TWO LEVER HANDLES

Consists of a $3 \times 1\frac{1}{8} \times \frac{3}{8}$ inch reversible latch bolt; cast brass lock with $\frac{1}{2} \times 4$ inch front and $\frac{7}{8}$ inch backset—with flat brass striking plate and one brass bit key; combination $1\frac{1}{8} \times 4\frac{5}{8}$ inch escutcheons and two lever handles.

No. 169R—Polished Finish Per Set \$8.00

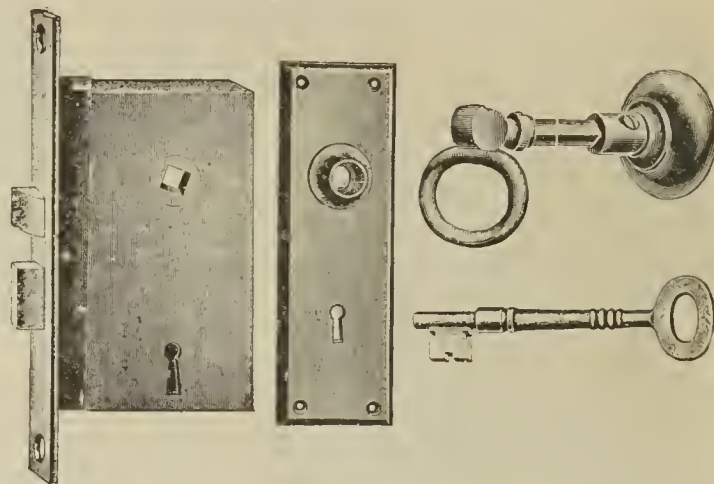
No. 169JJ

WITH COMBINATION ESCUTCHEONS, OVAL KNOB AND RING DROP HANDLE

Consists of a $3 \times 1\frac{1}{8} \times \frac{3}{8}$ inch, reversible latch bolt, cast brass lock—with flat brass striking plate and one bit key; combination escutcheons, $1\frac{1}{8} \times 4\frac{5}{8}$ inches and $1\frac{3}{8}$ inch oval knob and ring drop handle.

No. 169JJ—Polished Finish Per Set \$8.00

MORTISE LOCK SETS CAST BRASS—BIT KEY



WITH COMBINATION ESCUTCHEONS, ROUND
KNOB AND DROP HANDLE

For use with narrow stile, light doors.

Lock—Cast brass case, $3 \times 2 \times \frac{1}{2}$ inch thick; $1\frac{1}{2}$ inch bracket; reversible latch bolt; with flat brass striking plate and one brass bit key; extra keys can be furnished to order.

Trim— $1\frac{1}{4}$ inch round brass knob with heavy cast brass drop handle and $\frac{1}{8}$ inch spindle. Combination escutcheons, $1 \times 4\frac{5}{8}$ inches.

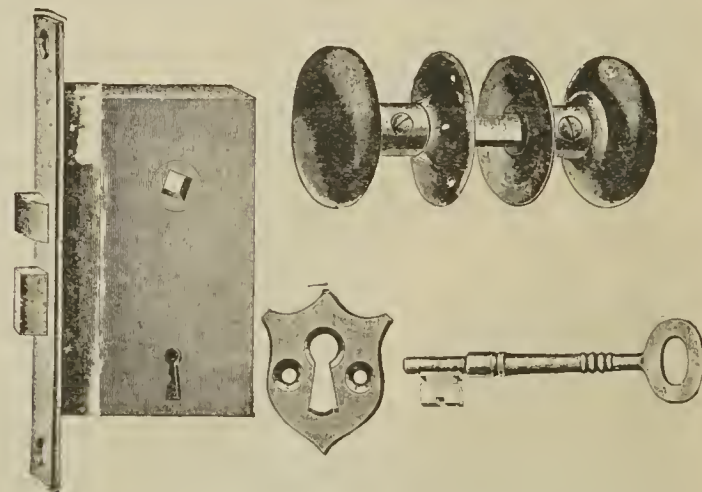
No. 175A—Polished Finish Per Set \$6.80

No. 175B

WITH ROUND KNOB, DROP HANDLE AND SHIELD ESCUTCHEONS

Consists of the above No. 175A lock set, but with shield key escutcheon in place of combination escutcheons.

No. 175B—Polished Finish Per Set \$6.00



WITH ROUND KNOBS AND SHIELD KEY
ESCUTCHEONS

This is the No. 175A lock set, but with two shield escutcheons in place of combination escutcheons, and two $1\frac{3}{4}$ inch round brass knobs instead of knob and drop handle.

No. 175C—Polished Finish Per Set \$6.00

No. 175D

WITH ROUND KNOBS AND COMBINATION ESCUTCHEONS

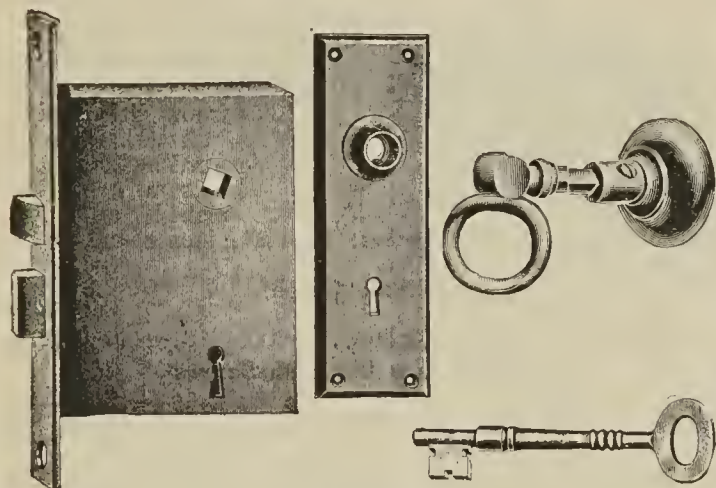
Consists of the above No. 175A lock set, but with two $1\frac{3}{4}$ inch round brass knobs in place of round knob and drop handle.

No. 175D—Polished Finish Per Set \$6.80

All Above, One Set in a Box with Screws

MORTISE LOCK SETS

CAST BRASS—BIT KEY

**Style 5045**

WITH COMBINATION ESCUTCHEONS, ROUND KNOB AND DROP HANDLE

Lock—Cast brass case, $4\frac{3}{8} \times 3\frac{5}{8} \times 1\frac{1}{8}$ inches thick; reversible latch bolt; back set, $2\frac{1}{8}$ inches.

Furnished with one brass key. Extra keys furnished to order.

Trim—Round knob, $2\frac{1}{8}$ inches in diameter; $\frac{3}{8}$ inch brass spindle and $2\frac{1}{8}$ inch drop handle; combination escutcheons, cast brass.

Per Set

No. 176A—Polished Finish\$10.60

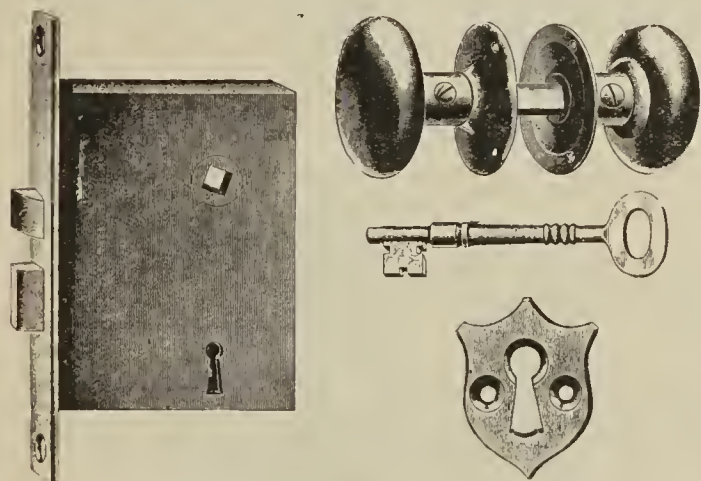
No. 176B

WITH SHIELD KEY ESCUTCHEONS, ROUND KNOB AND DROP HANDLE

Consists of the above No. 176A lock set, but furnished with shield key escutcheon in place of combination escutcheons.

Per Set

No. 176B—Polished Finish\$9.00



WITH SHIELD ESCUTCHEONS AND TWO ROUND KNOBS

Consists of the No. 176A lock set, but furnished with two $2\frac{1}{8}$ inch round brass knobs in place of knob and drop handle and shield key escutcheon in place of the combination escutcheons.

Per Set

No. 176C—Polished Finish\$9.00

No. 176D

WITH COMBINATION ESCUTCHEONS AND ROUND KNOBS

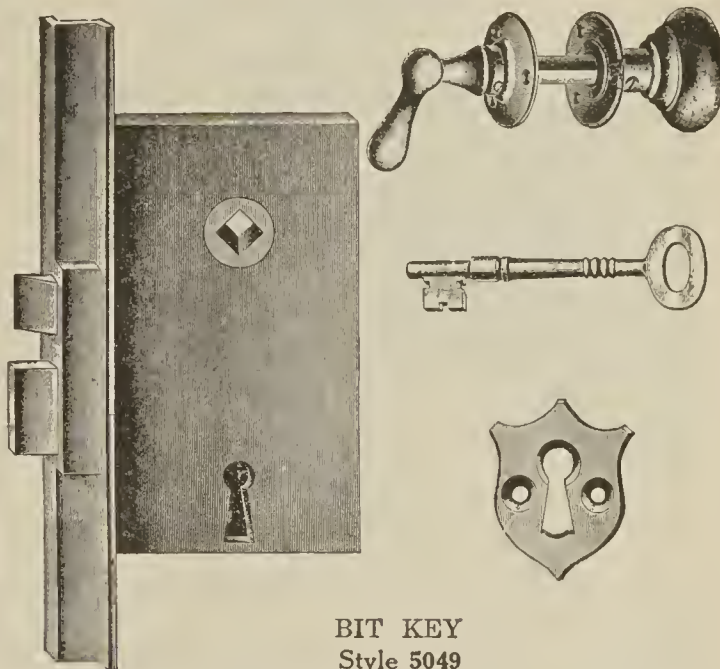
Consists of the No. 176A lock set, but with $2\frac{1}{8}$ inch round knobs in place of knob and drop handle.

Per Set

No. 176D—Polished Finish\$10.60

MORTISE LOCK SETS

CAST BRASS—RABBETED FRONT

**BIT KEY****Style 5049**

For cabin and companionway doors with narrow stiles.

Lock—Cast brass case, $4 \times 2\frac{1}{2} \times \frac{1}{8}$ inch thick made right and left hand.

Backset—From center of hub and key post, $1\frac{3}{8}$ inches.

With one brass key.

Trim—Round 2 inch knob and lever; $\frac{5}{16}$ inch spindle, cast brass shield, escutcheons.

Per Set

No. 81—Polished Finish\$10.75

One Set in a Box with Screws

MORTISE KNOB LATCHES

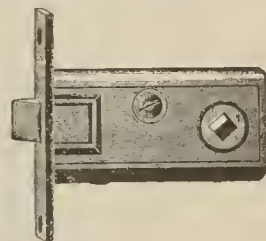
CAST BRASS

Style 5085

Brass case, $1\frac{1}{2} \times 3\frac{1}{4} \times \frac{1}{2}$ inch thick; $\frac{5}{16}$ inch spindle hub.

Per Dozen

No. 90—Polished Face\$27.00



WITH T HANDLE CAST BRONZE

Cast bronze case; reversible; $\frac{1}{4}$ inch spindle; polished face and oval knob plate.

| Nos. | Size Lock, Inches | Size Face Plate, Inches | Per Set |
|------|------------------------------------|-------------------------|---------|
| 195 | $1\frac{3}{8} \times 1\frac{1}{2}$ | $2\frac{1}{2} \times 2$ | 2.75 |
| 196 | $1\frac{5}{8} \times 1\frac{1}{4}$ | $2\frac{1}{2} \times 2$ | 2.75 |

All Above, Six in a Box

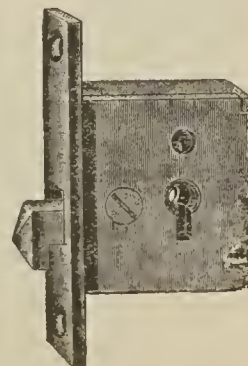
MORTISE SLIDING DOOR LOCKS

CAST BRONZE

For narrow stile, inside sliding doors. Extension hook latch bolt. Furnished with two brass bit keys; polished face.

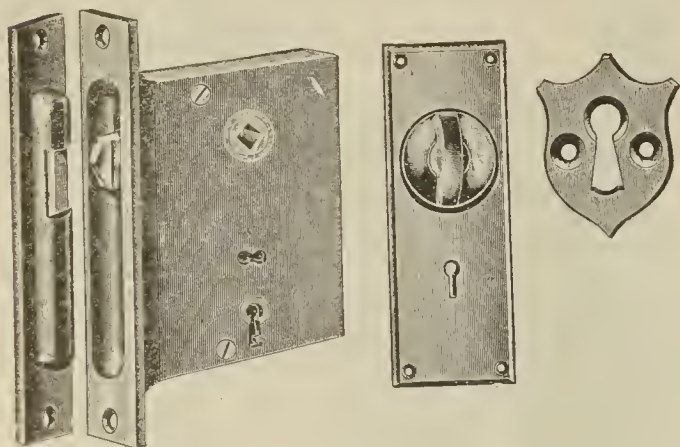
| Nos. | Size Case, Inches | Spacing to Center of Key-hole, Inch | Weight per Dozen, Lbs. | Per Dozen |
|------|--|-------------------------------------|------------------------|-----------|
| 2244 | $1\frac{3}{16} \times 1\frac{5}{8} \times \frac{1}{2}$ | $\frac{3}{4}$ | $2\frac{7}{16}$ | \$23.76 |
| 2245 | $1\frac{1}{2} \times 1\frac{5}{8} \times \frac{1}{2}$ | 1 | $3\frac{5}{16}$ | 25.74 |

All Above, Twelve in a Box



SLIDING DOOR LOCK SETS

MORTISE—CAST BRASS



Style 5053

CONCAVE FACE—RECESSED T HANDLE AND KNOB

For single or double doors. Lock case, $3\frac{3}{4} \times 3\frac{1}{4} \times \frac{5}{8}$ inch thick.

With one brass key.

Trim—Round solid knob, $2\frac{1}{8}$ inch and T handle; $\frac{1}{8}$ inch spindle.

With combination flush cup, tee handle escutcheon, $6\frac{1}{2} \times 2\frac{1}{2}$ inches and shield key hole escutcheon.

No. 2474A—Polished Finish.....**\$12.60**

No. 2475B—Same Set but with Flush T Handles instead of Knob and T Handle.....**13.30**

No. 2476A—Lock, $5 \times 4 \times \frac{3}{4}$ Inch Thick. Round Knob, $2\frac{1}{4}$ Inches and Flush T Handle; $\frac{3}{8}$ Inch Spindle. Combination Flush Escutcheons $6\frac{3}{4} \times 2\frac{3}{4}$ Inches; Combination Escutcheon for Knob, $7\frac{3}{4} \times 2\frac{3}{4}$ Inches; One Key.....**22.00**

WITH JANUS FACE

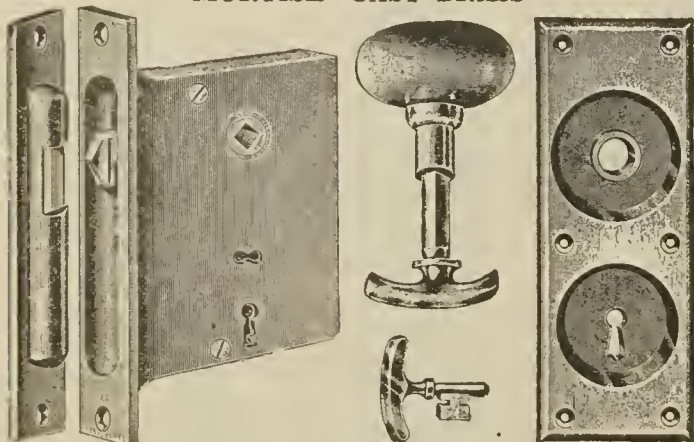
FOR USE ON $1\frac{1}{8}$ INCH DOORS

Same as the No. 2474A Lock set but with $3\frac{1}{4} \times 1\frac{3}{4} \times \frac{1}{2}$ inch lock with front of $\frac{1}{8} \times 4\frac{3}{8}$ inches and two flush tee handle escutcheons, $1\frac{1}{8} \times 4\frac{5}{8}$ inches.

No. 2473A—Polished**\$12.00**

All Above, One Set in a Box with Screws

MORTISE—CAST BRASS



Style 5051

CONCAVE FACE—FOR SINGLE OR DOUBLE DOORS

Lock—Cast brass case, $4\frac{1}{8} \times 3\frac{1}{8} \times \frac{3}{4}$ inches, backset, $2\frac{1}{4}$ inches; furnished with two brass keys. Size of front, $4\frac{3}{8} \times \frac{1}{8}$ inches.

Trim—Furnished with T handle, solid oval knob, $2\frac{3}{4} \times 1\frac{3}{4}$ inches, $\frac{3}{8}$ inch brass spindle, one combination flush cup escutcheon, 7×2 inches and one combination escutcheon for other side. Emery finish lock and trim.

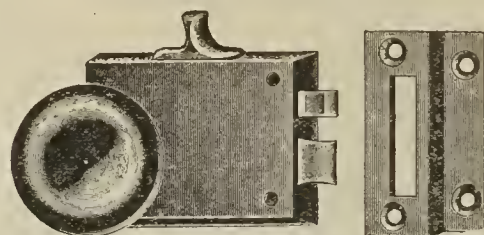
No. 2230—Emery Finish.....**\$20.00**

TOILET DOOR LOCK SETS

CAST BRASS

Style 5029

Lock has reversible latch operated from either side. Mortise keepers are furnished but nosings will be furnished on order.



Size of lock, $2\frac{1}{4} \times 3\frac{1}{4}$ inches; with $1\frac{3}{4}$ inch round knobs and lever handles.

Polished Finish

No. 2247—With Round Knob.....**\$7.25**
One Set in a Box with Screws

No. 47—Locks Only.....**\$46.80**

TOILET DOOR INDICATOR BOLTS

CAST BRASS

Style 5117

Flanged rim case; $2\frac{3}{4} \times 3\frac{3}{4}$ inches.

Throwing bolt inside changes indication, showing occupancy. Only indicates when door is bolted. Furnished with flat strike to order.

Polished Finish

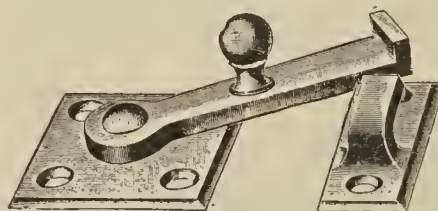
No. 1.....**\$38.00**

Six in a Box

TOILET DOOR LATCHES

CAST BRASS

Beveled edge plates, 2×2 inches with $3\frac{1}{2}$ inch flat bar.



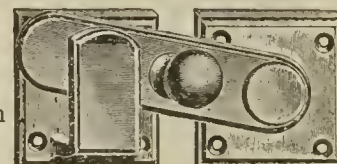
No. 5119—Polished Finish.....**\$23.40**

Twelve in a Box

EXTRA HEAVY

Style 5121

Plates are 2×2 inches with 4 inch bar and knob.

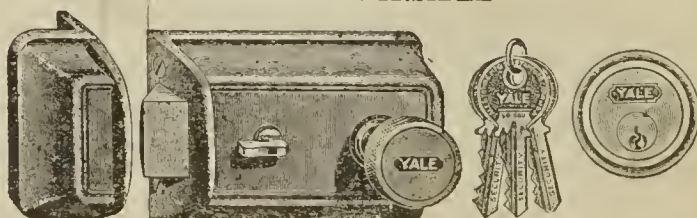


No. 2—Polished Finish.....**\$48.00**

Per Dozen

CYLINDER RIM NIGHT LATCHES

YALE—REVERSIBLE



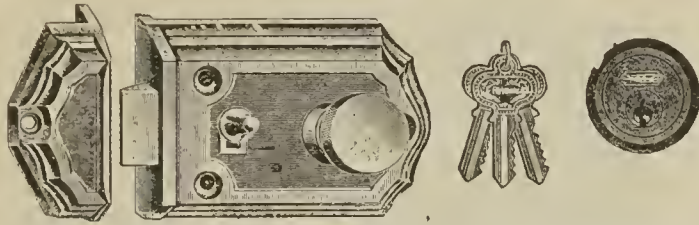
Five-pin tumbler, cast bronze cylinder with 3 No. 8 nickel bronze keys; for doors $\frac{7}{8}$ to $2\frac{1}{2}$ inches in thickness. Cast-iron case and strike; bronze bolt, knob and stop.

Case, $2\frac{3}{8} \times 3\frac{1}{2}$ inches; backset, $2\frac{3}{8}$ inches; operated by key from outside and by turn knob from inside; bolt may be held back by a stop; case and strike, antique copper finish.

No. 05042X—Rim Strike; Weight Each, $1\frac{1}{2}$ Lbs.....**\$7.50**

Each

RIM NIGHT LATCHES TIEBOUT

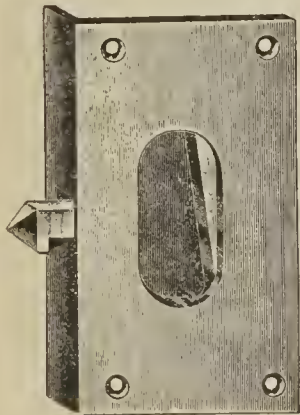


Five-pin tumbler, cast bronze cylinders with 3 No. 8 nickel bronze keys; for doors $\frac{7}{8}$ to $2\frac{1}{2}$ inches in thickness. Cast brass case and strikes; bronze bolts, knobs and stops.

Case, $2\frac{3}{8} \times 3\frac{5}{8} \times 1$ inches; backset, $2\frac{3}{8}$ inches; operated by key from outside and by turn knob from inside; bolt may be held back by stop; case and strike; emery finish.

No. 2223—Rim Strike; Weight Each, $1\frac{1}{2}$ Lbs. \$6.75
No. 2223A—Japanned 4.00

SLIDING ELEVATOR DOOR LATCHES



CAST BRASS
Style 5095

Heavy cast brass surface latch; opened from the outside with a key. Straight face; extension latch bolt. One key furnished with each lock. Extra keys can be furnished to order.

POLISHED FINISH

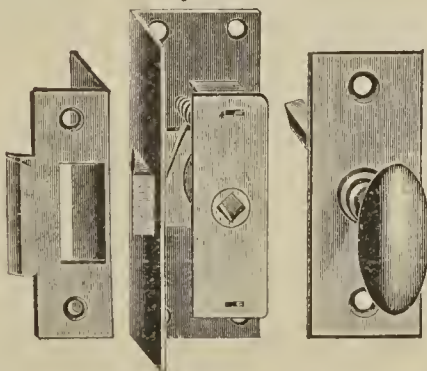
| Nos. | Size, Inches | Type Latch | Per Dozen |
|------|------------------------------------|----------------|-----------|
| *71 | $5\frac{5}{8} \times 3\frac{1}{8}$ | Non-reversible | \$68.40 |
| 1220 | $5 \times 2\frac{1}{2}$ | Reversible | 44.40 |
| 3000 | $5\frac{5}{8} \times 3\frac{1}{8}$ | Reversible | 58.80 |

* Extra heavy type.

Six in a Box

CUPBOARD LATCHES

CAST BRASS
Style 5055



Adjustable to wood from $\frac{3}{4}$ to $1\frac{1}{2}$ inches thick but can be furnished for other thicknesses; $\frac{1}{8}$ inch spindle hub is regularly supplied, but can be furnished to order for $\frac{1}{4}$ inch spindle.

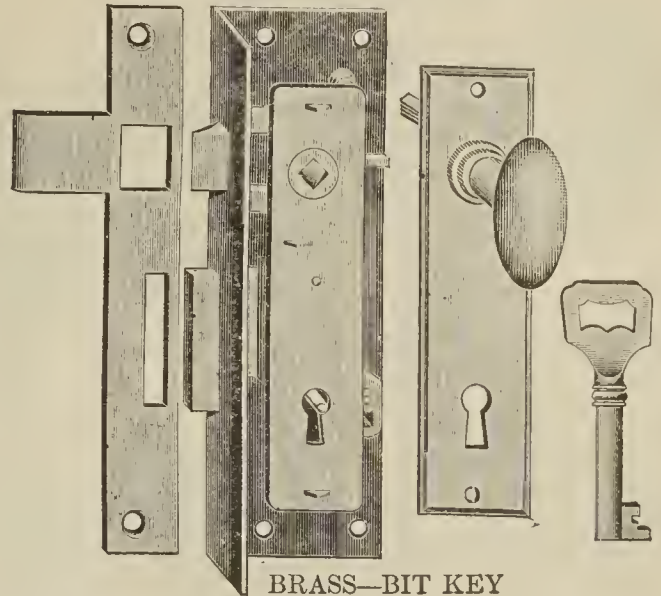
BUFFED AND LACQUERED FINISH

| Nos. | Size, Inches | Selvage to Hub Center, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|-------------------------|-------------------------------|------------------------|-----------|
| 2231 | $3 \times 1\frac{1}{8}$ | $\frac{3}{4}$ | $4\frac{1}{4}$ | *\$.... |
| 2232 | $3 \times 1\frac{3}{4}$ | $\frac{7}{8}$ | $4\frac{7}{8}$ | .... |
| 2233 | $3 \times 1\frac{7}{8}$ | 1 | 5 | .... |
| 2234 | $3 \times 2\frac{1}{4}$ | $1\frac{1}{4}$ | $5\frac{1}{4}$ | .... |
| 2235 | $3 \times 2\frac{1}{2}$ | $1\frac{1}{2}$ | $5\frac{1}{2}$ | .... |

*On Application.

Twelve in a Box

CUPBOARD LOCKS



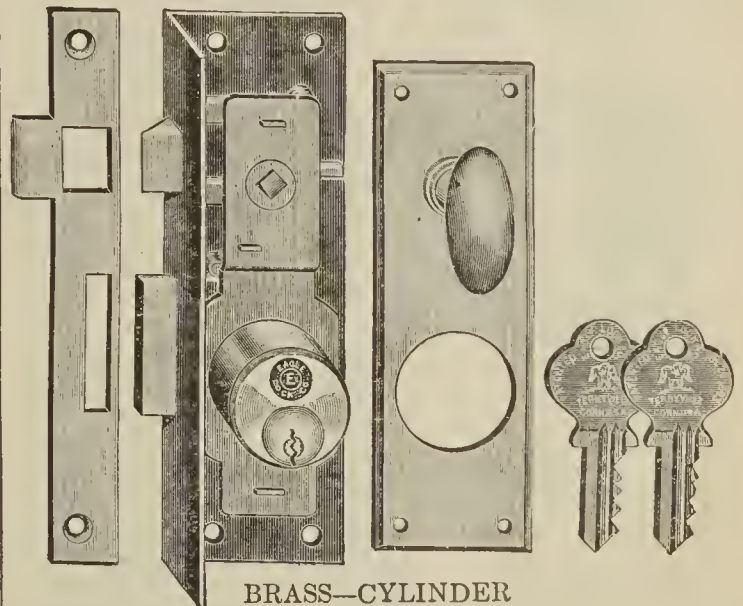
BRASS—BIT KEY

Has broad heavy dead and latch bolts; heavy brass escutcheon plate with oval turn knob; square selvage and three secure lever locks. Made regularly with hub for $\frac{1}{8}$ inch spindle but can be furnished to order for $\frac{1}{4}$ inch spindle. One brass flat bow key furnished with each lock. Made in twelve key changes but can be furnished to order with 3120 changes of key at an extra price. Made for right and left hand doors. Buffed and lacquered finish.

| Nos. | Size of Plate, Inches | Size Escutcheon, Inches | Selvage to Key, Pin, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|-------------------------|------------------------------------|-----------------------------|------------------------|-----------|
| 2236 | $5 \times 1\frac{1}{2}$ | 4 x1 | $\frac{3}{4}$ | 9 | *\$.... |
| 2237 | $5 \times 1\frac{5}{8}$ | 4 x1 | $\frac{7}{8}$ | $9\frac{3}{8}$ | .... |
| 2238 | $5 \times 1\frac{3}{4}$ | $4\frac{1}{2} \times 1\frac{1}{2}$ | 1 | $10\frac{1}{8}$ | .... |
| 2239 | 5×2 | $4\frac{1}{2} \times 1\frac{1}{2}$ | $1\frac{1}{4}$ | $10\frac{1}{2}$ | .... |
| 2240 | $5 \times 2\frac{1}{4}$ | $4\frac{1}{2} \times 1\frac{1}{2}$ | $1\frac{1}{2}$ | $11\frac{1}{8}$ | .... |

*On Application.

Twelve in a Box



BRASS—CYLINDER

Has broad, heavy dead and latch bolts; heavy brass escutcheon plate, $4\frac{1}{2} \times 1\frac{1}{2}$ inches with oval turn knob. Cylinder is $1\frac{1}{8}$ inches in diameter and is furnished with two embossed and gold plated nickel silver keys. Unlimited changes. Regularly made with hub for $\frac{1}{8}$ inch spindle, but can be furnished to order for $\frac{1}{4}$ inch spindle. Made for either right or left hand doors. Can be furnished for different thickness wood and with keys all alike on special order. Buffed and lacquered finish.

| Nos. | Size, Inches | Selvage to Center of Cylinder | Weight per Dozen, Lbs. | Per Dozen |
|--------|-------------------------|-------------------------------|------------------------|-----------|
| 03192C | $5 \times 1\frac{1}{2}$ | $\frac{3}{4}$ | $10\frac{5}{8}$ | *\$.... |
| 03192D | $5 \times 1\frac{5}{8}$ | $\frac{7}{8}$ | $10\frac{11}{8}$ | .... |
| 03192E | $5 \times 1\frac{3}{4}$ | 1 | $10\frac{7}{8}$ | .... |
| 03192F | 5×2 | $1\frac{1}{4}$ | $11\frac{1}{8}$ | .... |
| 03192G | $5 \times 2\frac{1}{4}$ | $1\frac{1}{2}$ | $12\frac{1}{8}$ | .... |

*On Application.

One in a Box with Screws

WARDROBE LOCKS



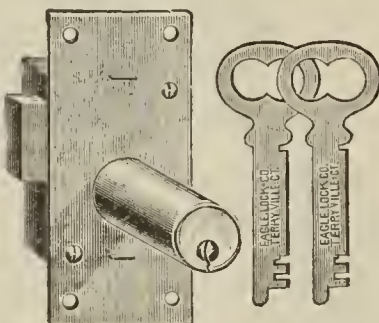
BRASS

Solid square box; bolt operates both right and left. Two secure levers; brass flat bow key. Twelve key changes. Furnished in sets alike or all different to order.

| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------------------------|------------------------|-----------|
| 2246 | 2 x $\frac{7}{8}$ | $\frac{3}{4}$ | \$18.79 |
| 2249 | $2\frac{1}{2}$ x $1\frac{1}{8}$ | $1\frac{1}{2}$ | 16.74 |
| 2250 | $2\frac{3}{4}$ x $1\frac{1}{4}$ | $1\frac{7}{8}$ | 20.83 |
| 2251 | 3 x $1\frac{3}{4}$ | 2 | 23.25 |
| 2252 | $3\frac{1}{2}$ x $\frac{1}{2}$ | $2\frac{1}{8}$ | 27.16 |

BRASS
WITH CYLINDER

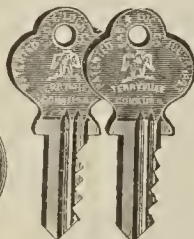
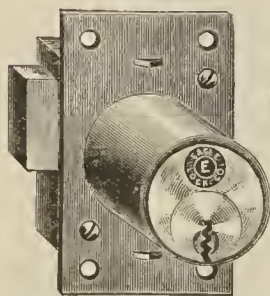
Broad heavy bolt; solid square box; screwed. Bolt operates both to the right and left; two secure levers. With two nickel plated flat steel keys. Twelve key changes. Cylinder is $\frac{3}{4}$ inch long and is for $\frac{7}{8}$ inch wood thickness. Can be furnished in sets alike to order.



| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------------------------|------------------------|-----------|
| 2253 | $1\frac{7}{8}$ x $\frac{7}{8}$ | $1\frac{1}{8}$ | \$22.32 |
| 2254 | $2\frac{3}{4}$ x $1\frac{1}{4}$ | $2\frac{1}{8}$ | 26.41 |
| 2255 | 3 x $1\frac{3}{4}$ | $3\frac{1}{4}$ | 32.92 |
| 2256 | $3\frac{1}{2}$ x 2 | $3\frac{1}{2}$ | 41.85 |
| 2257 | 4 x $2\frac{1}{2}$ | $5\frac{1}{8}$ | 50.22 |

Nos. 2255, 2256, and 2257 also furnished for 1 and $1\frac{1}{8}$ inch wood.

All Above, Six in a Box; Except No. 2253, Twelve in a Box

BRASS
WITH CYLINDER

Broad, heavy bolt; solid square box, screwed. Bolt operates both to the right and left. With two embossed and gold plated, nickel silver keys; unlimited changes. Cylinder is $1\frac{1}{8}$ inches in

diameter and is for $\frac{7}{8}$ inch wood.

No. 03151—Size, $2\frac{1}{2}$ x $2\frac{1}{2}$ Inches; Weight Each, $6\frac{1}{2}$ Ounces. Each \$6.12

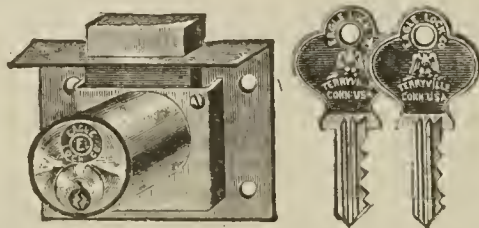
Note—If locks are specially ordered alike, one key each is regularly furnished.

One in a Box with Screws

DRAWER LOCKS

BRASS—WITH
CYLINDER

Square selvage; broad, heavy bolt; square box, screwed, unlimited changes. No two alike. With two embossed, nickel silver, gold plated keys. Cylinder is $\frac{7}{8}$ inch in diameter for wood $\frac{7}{8}$ inch thick.



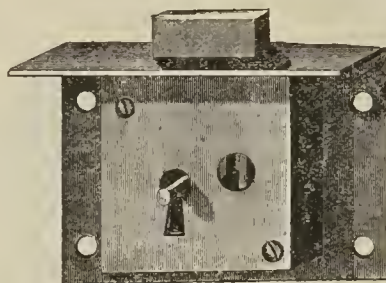
No. 03201—Size, 2 x $1\frac{3}{8}$ Inches; Selvage to Center of Cylinder, $\frac{3}{4}$ Inch; Weight Each, $6\frac{1}{2}$ Ounces. Each \$4.70

Note—If ordered all alike, one key is regularly furnished.

One in a Box with Screws

DRAWER LOCKS

BRASS



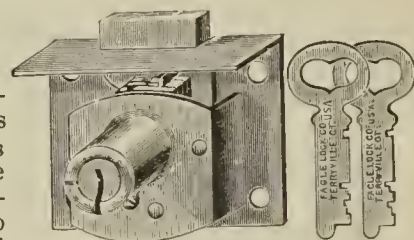
Solid square box; screwed. Two and three secure levers. Square selvage with one flat bow brass key. Made in twelve key changes; can be furnished alike or alike in sets at

an extra price. For $\frac{7}{8}$ inch wood. Other thicknesses to order

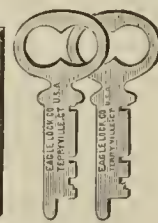
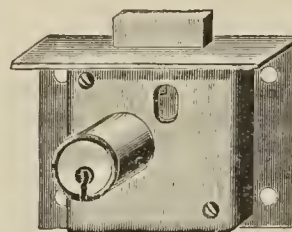
| Nos. | Size, Inches | Selvage to Key Pin, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------------------------|----------------------------|------------------------|-----------|
| 2258 | $2\frac{1}{4}$ x $1\frac{5}{8}$ | $\frac{7}{8}$ | $1\frac{1}{2}$ | \$19.90 |
| 2259 | $2\frac{1}{2}$ x $1\frac{7}{8}$ | $1\frac{1}{8}$ | $2\frac{1}{8}$ | 20.83 |
| 2260 | $2\frac{3}{4}$ x $1\frac{1}{2}$ | $\frac{7}{8}$ | $2\frac{1}{2}$ | 23.25 |
| 2261 | 3 x 2 | $1\frac{1}{8}$ | $2\frac{7}{8}$ | 25.11 |

CAST BRASS
WITH CYLINDER

Broad, heavy bolt; secure lever. Cylinders made regularly for $\frac{7}{8}$ inch wood but can be furnished for any thickness desired. With two flat steel, nickel plated keys; twelve changes. Furnished in sets alike to order. Selvage to center of cylinder $\frac{7}{8}$ inch.



| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------------------------|------------------------|-----------|
| 2262 | 2 x $1\frac{5}{8}$ | $1\frac{5}{8}$ | \$20.83 |
| 2263 | $2\frac{1}{4}$ x $1\frac{1}{2}$ | $2\frac{1}{4}$ | 22.32 |

BRASS
CYLINDER

Solid square box; screwed; square selvage. Three secure levers. Broad, heavy bolt. Made regularly for $\frac{7}{8}$ inch wood, but can be furnished for different thicknesses. With two flat, nickel plated steel keys. Twelve key changes. Furnished in sets alike to order.

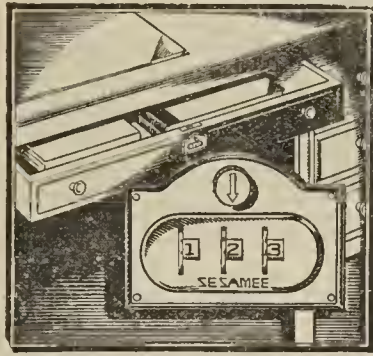
| Nos. | Size, Inches | Selvage to Key Pin, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------------------------|----------------------------|------------------------|-----------|
| 2264 | $2\frac{1}{2}$ x $1\frac{7}{8}$ | $\frac{7}{8}$ | $3\frac{1}{8}$ | \$35.54 |
| 2265 | 3 x 2 | $1\frac{1}{4}$ | $3\frac{3}{8}$ | 32.18 |

LOCK TRIM CHART

| Trim Letter | Type of Escutcheon | Kind of Knobs or Handles |
|-------------|--------------------|-------------------------------|
| A | Combination | Round Knob and Drop Handle |
| B | Shield | Round Knob and Drop Handle |
| C | Shield | Round Knob and Round Knob |
| D | Combination | Round Knob and Round Knob |
| F | Shield | Oval Knob and Oval Knob |
| G | Combination | Oval Knob and Oval Knob |
| H | Shield | Oval Knob and Drop Handle |
| J | Combination | Oval Knob and Drop Handle |
| K | Combination | Round Knob and Lever Handle |
| L | Shield | Round Knob and Lever Handle |
| M | Shield | Oval Knob and Lever Handle |
| P | Combination | Oval Knob and Lever Handle |
| R | Combination | Lever Handle and Lever Handle |
| S | Shield | Lever Handle and Lever Handle |
| T | Combination | Glass Knob and Glass Knob |
| U | Combination | Glass Knob and Drop Handle |
| W | Shield | Glass Knob and Glass Knob |
| AA | Combination | Round Knob and Ring Handle |
| BB | Shield | Round Knob and Ring Handle |
| HH | Shield | Oval Knob and Ring Handle |
| JJ | Combination | Oval Knob and Ring Handle |
| UU | Combination | Glass Knob and Ring Handle |

DRAWER LOCKS

SESAMEE



This drawer lock is so designed that you select and set your own combination, any number that has a special meaning to you and is easy to remember. Having set your combination, it is the only one of a thousand that will open it. To lock the drawer merely turn the knob and roll one or more wheels so combination cannot be seen. To unlock, flick wheels to combination and turn knob so arrow points towards wheels. Made of a non-corrosive metal throughout. Is furnished in brass, nickel or oxidized finish.

No. 330J—Drawer Lock Each \$2.25
No. 332J—Cupboard Lock 2.25

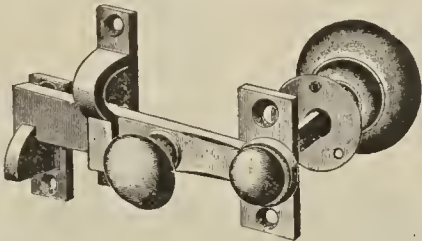
Specify Finish Desired

SHIP DOOR LATCHES

NEW YORK
PATTERN

Style 5067

Cast brass; with solid round brass knob, with rosette and heavy brass bar. $1\frac{3}{4}$ inch knob; bar $4\frac{1}{2}$ inches long.



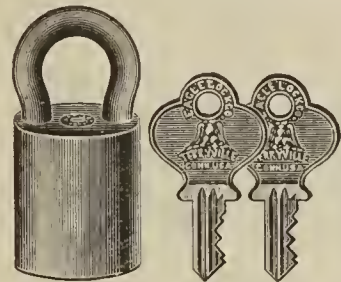
Per Dozen

No. 2—Plain Finish \$32.88
No. 2242—Boston Pattern with Padlock Attachment and Holder 32.88

PADLOCKS

BRASS—PIN TUMBLER

Mechanism of these padlocks is contained in a solid brass block machined to retain it. Over this block is drawn a heavy brass, polished jacket, making a most attractive appearance. Shackle is case hardened nickel plated steel and is locked in the case by a double rotating bolt which engages in two notches at



both ends of the shackle. Unlimited key changes.

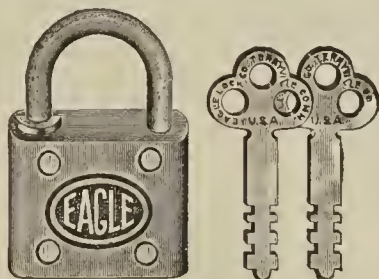
| Nos. | Size Case, Ins. | Wgt. per Dozen, Lbs. | Per Dozen |
|-------|------------------------------------|----------------------|-----------|
| 04810 | $1\frac{1}{4} \times 1\frac{1}{8}$ | $5\frac{1}{2}$ | \$17.06 |
| 04811 | $1\frac{1}{2} \times 1\frac{1}{4}$ | 6 | 21.35 |

With Bronze Shackles

| Nos. | Size Case, Ins. | Wgt. per Dozen, Lbs. | Per Dozen |
|---------|------------------------------------|----------------------|-----------|
| 04810BZ | $1\frac{1}{4} \times 1\frac{1}{8}$ | $5\frac{1}{2}$ | \$18.65 |
| 04811BZ | $1\frac{1}{2} \times 1\frac{1}{4}$ | 6 | 22.93 |

BRASS

Polished, cast brass case. Self locking; automatic spring, shackle flies open to a good quarter-turn position when unlocked. Nickel plated iron shackle. Furnished with two nickel plated flat steel keys; six key changes. No. 04608 can be made with detachable shackle in several lengths.



| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|-------|----------------|------------------------|-----------|
| 04606 | $1\frac{1}{4}$ | $1\frac{1}{8}$ | \$3.55 |
| 04607 | $1\frac{5}{8}$ | 3 | 4.20 |
| 04608 | $2\frac{1}{8}$ | $5\frac{1}{8}$ | 4.90 |

No. 04608, Six; All Others, Twelve in a Box

PADLOCKS

YALE—CAST BRONZE



Self locking, spring shackle; lever tumbler mechanism; case and shackle fire wheel finish. With two nickel bronze keys with gold bows.

| Nos. | Size Case, Inches | Number of Levers | Number of Key Changes | Weight per Dozen, Lbs. | Per Dozen |
|--------------------|-------------------|------------------|-----------------------|------------------------|-----------|
| 813 | 1 | 3 | 48 | $1\frac{5}{8}$ | \$23.80 |
| *813 $\frac{1}{2}$ | 1 | 3 | 48 | $2\frac{1}{8}$ | 25.60 |
| 823 | $1\frac{1}{4}$ | 3 | 48 | $2\frac{3}{8}$ | 25.50 |
| *823 $\frac{1}{2}$ | $1\frac{1}{4}$ | 3 | 48 | $3\frac{1}{4}$ | 27.50 |
| 833 | $1\frac{1}{2}$ | 3 | 48 | $3\frac{1}{2}$ | 29.50 |
| *833 $\frac{1}{2}$ | $1\frac{1}{2}$ | 3 | 48 | $4\frac{1}{4}$ | 31.70 |
| 843 | $1\frac{3}{4}$ | 4 | 72 | $4\frac{3}{4}$ | 32.50 |
| *843 $\frac{1}{2}$ | $1\frac{3}{4}$ | 4 | 72 | $6\frac{1}{4}$ | 32.70 |
| 853 | 2 | 4 | 144 | $7\frac{1}{4}$ | 36.00 |
| *853 $\frac{1}{2}$ | 2 | 4 | 144 | ... | 39.00 |

*With 9 inches of chain attached to shackle.

All Above, Five in a Box

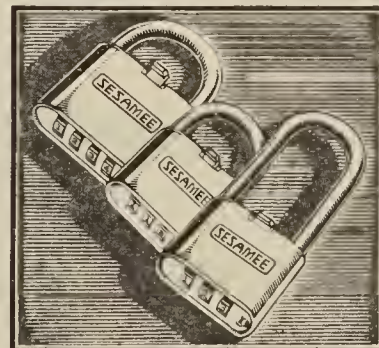
HACK SAW—FILE
BOLT CUTTER PROOF

A sturdy Brass pin-tumbler padlock. Made from solid blocks of Malleable Iron and machined to greatest precision to receive locking mechanism—The Shackle is made from a Special Alloy steel, scientifically hardened and will actually resist Bolt Cutters, Hack Saws and Files. Thoroughly Rust-proof inside and outside. Can be furnished in 60 Different Changes, Master Keyed.



| Nos. | Body, Inches | Shackle Clearance, Inches | Shackle Diameter, Inches | Each |
|------|----------------|---------------------------|--------------------------|--------|
| 425 | $1\frac{1}{2}$ | $\frac{13}{16}$ | $\frac{1}{4}$ | \$0.50 |
| 430 | $1\frac{3}{4}$ | 1 | $\frac{9}{32}$ | .75 |
| 435 | 2 | $1\frac{3}{16}$ | $\frac{5}{16}$ | 1.00 |

SESAMEE



A simple combination of numbers is the key to this type of padlock. It can be opened with one hand. There are 1,000 different combinations in the smaller padlocks and 10,000 in the four-wheel type. Contains no tumblers which makes it impossible to pick by hand. The combination can be changed

at will in a few seconds. Constructed of specially treated materials and guaranteed against rust or corrosion. For utmost security the four-wheel type is recommended because of its greater range of combinations. The padlocks are finished in Brass and Nickel.

| Nos. | Type | Each |
|-------|--------------------------------------|--------|
| 240R | Small Padlock..... | \$1.50 |
| 240RL | Long Shackle Padlock..... | 1.50 |
| 341R | Large Padlock (four wheel type)..... | 3.00 |

Specify Finish Desired

PADLOCKS



TIEBOUT
GALVANIZED STEEL

Self locking; spring shackle; six lever mechanism; extra strong interior parts with two, nickel plated, malleable iron double bitted barrel keys. Twelve key changes.

Per Dozen

No. 2270—Case, 2 Inches; Weight per Dozen, 4 ⁵/₁₆ Lbs. . . \$9.00
Twelve in a Box

PADLOCK EYES

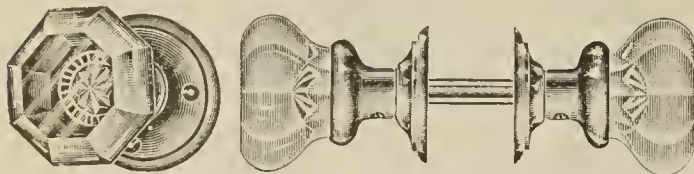
Heavy cast brass with large round padlock eye. Full polished finish.



| Nos. | Size Plate, Inches | Per Dozen |
|------|--------------------|-----------|
| 1239 | 1 3/4 x 1 1/2 | \$3.05 |
| 1240 | 2 x 1 3/4 | 4.34 |
| 1241 | 2 5/8 x 2 | 4.70 |

Twelve in a Box

GLASS DOOR KNOBS

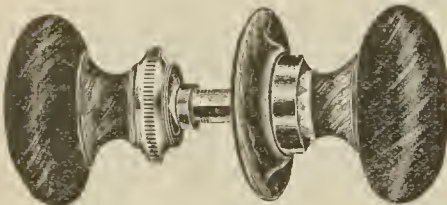


Octagon type, clear crystal pressed glass; polished wrought brass roses, 2 1/4 inches in diameter; 5/16 inch, adjustable plain brass spindle.

| | |
|---|-------------------|
| No. 118 3/4—Size, 1 3/4 Inches. | Per Dozen \$37.00 |
| No. 118—Size, 2 1/4 Inches. | 37.00 |

One Pair in a Box

DOOR KNOBS



MAHOGANY
FINISH

Polished, hardwood knobs with polished brass trimmings. Furnished for rim or mortise locks.

Per Dozen

No. 2362—Diameter Knob, 2 1/4 Inches; 3/8 Inch Brass Screwless Spindle. \$

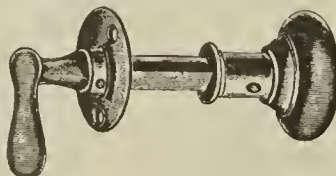
Price on Application

CAST BRASS

WITH LEVER HANDLE

Style 5159—For Rim Locks

Solid, cast brass knob; lever rosette and spindle. Polished finish.



| Nos. | Size Knobs and Levers, Inches | Size Spindle, Inch | Per Dozen |
|------|-------------------------------|--------------------|-----------|
| 2346 | 1 3/4 | 5/16 | \$29.04 |
| 2347 | 2 | 5/16 | 29.88 |
| 2348 | 2 1/8 | 5/16 | 36.72 |
| 2349 | 2 1/8 | 3/8 | 36.72 |



FOR MORTISE LOCKS
Style 5163

Same as above but with two cast brass rosettes. Polished finish.

| Nos. | Size Knob and Levers, Inches | Size Spindle, Inch | Per Dozen |
|------|------------------------------|--------------------|-----------|
| 2354 | 1 3/4 | 5/16 | \$29.04 |
| 2355 | 2 | 5/16 | 29.88 |
| 2356 | 2 1/8 | 5/16 | 36.72 |
| 2357 | 2 1/8 | 3/8 | 36.72 |

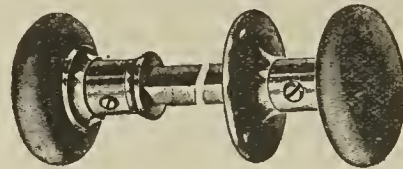
DOOR KNOBS

CAST BRASS

PLAIN ROUND
KNOBS

Style 5151—For Rim
Locks

Solid round cast brass knobs and rosette.



Wrought brass spindles. Polished finish. Furnished to order with hubs for use on iron doors.

| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|-----------------------|--------------------|-----------|
| 2230 | 1 3/4 | 5/16 | \$27.00 |
| 2331 | 2 | 5/16 | 27.84 |
| 2332 | 2 1/8 | 5/16 | 33.48 |
| 2333 | 2 1/8 | 3/8 | 33.48 |
| 2334 | 2 1/4 | 3/8 | .... |

Style 5155—For Mortise
Locks

Same as the above but with two cast brass rosettes. Polished finish.

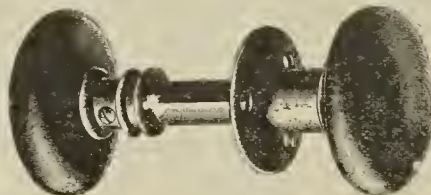


| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|-----------------------|--------------------|-----------|
| 2338 | 1 3/4 | 5/16 | \$27.00 |
| 2339 | 2 | 5/16 | 27.84 |
| 2340 | 2 1/8 | 5/16 | 33.48 |
| 2341 | 2 1/8 | 3/8 | 33.48 |
| 2342 | 2 1/4 | 3/8 | .... |

PLAIN OVAL KNOBS

Style 5153—For Rim
Locks

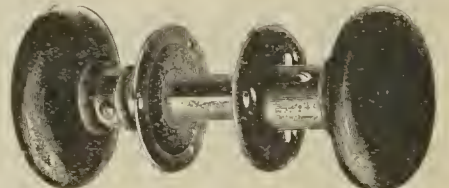
Oval cast brass solid knobs and round roses. Wrought brass spindles; polished finish.



| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|-----------------------|--------------------|-----------|
| 2335 | 2 x 1 | 5/16 | \$34.80 |
| 2336 | 2 1/4 x 1 3/4 | 5/16 | 38.28 |
| 2337 | 2 1/4 x 1 3/4 | 3/8 | 38.28 |

Style 5157—For Mortise
Locks

Same as the above but with two cast brass rosettes. Polished finish.

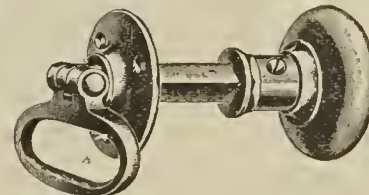


| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|-----------------------|--------------------|-----------|
| 2343 | 2 x 1 | 5/16 | \$34.80 |
| 2344 | 2 1/4 x 1 3/4 | 5/16 | 38.28 |
| 2345 | 2 1/4 x 1 3/4 | 3/8 | 38.28 |

WITH DROP HANDLE

Style 5139—For Rim Locks

Solid round knob, drop handle and rosette. Cast brass spindles. Polished finish.

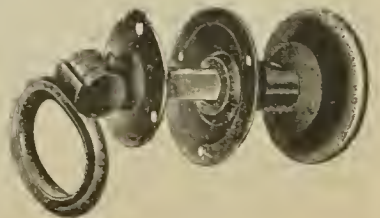


| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|-----------------------|--------------------|-----------|
| 2308 | 1 3/4 | 5/16 | \$27.00 |
| 2309 | 2 | 5/16 | 27.84 |
| 2310 | 2 1/8 | 5/16 | 33.48 |
| 2311 | 2 1/8 | 3/8 | 33.48 |

Style 5138—For Mortise
Locks

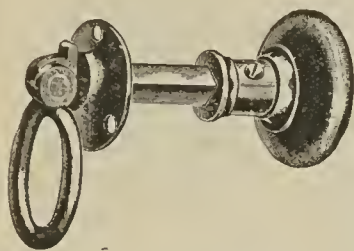
Same as above but with two round rosettes.

| Nos. | Diameter Knob, Inches | Per Dozen |
|------|-----------------------|-----------|
| 2314 | 1 3/4 | \$27.00 |
| 2315 | 2 | 27.84 |
| 2316 | 2 1/8 | 33.48 |
| 2317 | 2 1/8 | 33.48 |



DOOR KNOBS

CAST BRASS



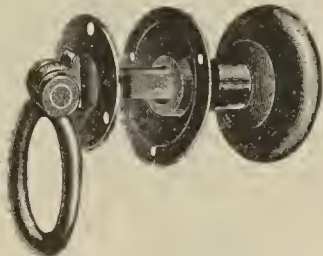
WITH DROP RING
HANDLE
Style 5137—For Rim Locks

Solid, cast brass round knob,
drop ring and rosette. Cast
brass spindle. Polished fin-
ish.

| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|--------------------------|-----------------------|--------------|
| 2312 | 2 1/8 | 1 5/8 | \$33.48 |
| 2313 | 2 1/8 | 3/8 | 33.48 |

Style 5141—For Mortise Locks

Same as the above but with
two cast brass rosettes. Polished
finish.



| Nos. | Diameter Knob, Inches | Size Spindle, Inch | Per Dozen |
|------|--------------------------|-----------------------|--------------|
| 2718 | 2 1/8 | 1 5/8 | \$33.48 |
| 2319 | 2 1/8 | 3/8 | 33.48 |

SHIP DOOR HANDLES

CAST BRASS

DOUBLE DROP
HANDLES

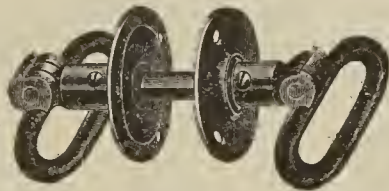
Style 5143—For Rim Locks

Solid, cast brass drop
handles and rosette wrought
brass spindle. Polished
finish.

| Nos. | Size Drop, Inches | Size Spindle, Inch | Per Dozen |
|------|----------------------|-----------------------|--------------|
| 2320 | 2 1/8 | 1 5/8 | \$33.48 |
| 2321 | 2 1/8 | 3/8 | 33.48 |

Style 5147—For Mortise
Locks

Same as above but with
two cast brass rosettes.
Polished finish.



| Nos. | Size Drop, Inches | Size Spindle, Inch | Per Dozen |
|------|----------------------|-----------------------|--------------|
| 2326 | 2 1/8 | 1 5/8 | \$33.48 |
| 2327 | 2 1/8 | 3/8 | 33.48 |

WITH DOUBLE DROP
RINGS

Style 5145—For Rim Locks

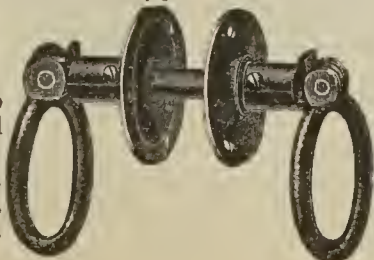
With solid, cast brass
rings and rosette. Wrought
brass spindle. Polished
finish.

| Nos. | Diameter Rings, Inches | Size Spindle, Inch | Per Dozen |
|------|---------------------------|-----------------------|--------------|
| 2322 | 2 1/8 | 1 5/8 | \$33.48 |
| 2324 | 2 1/8 | 3/8 | 33.48 |

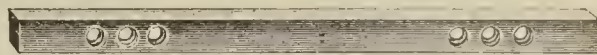
Style 5149—For Mortise
Locks

Same as above but with two
cast brass rosettes. Polished
finish.

| Nos. | Per Dozen |
|------|-----------|
| 2328 | \$33.48 |
| 2329 | 33.48 |



KNOB SPINDLES



WROUGHT BRASS

Style 5133

For standard spindle knobs; drilled and tapped.

PLAIN STRAIGHT

| Nos. | Size, Inch | Description | Per Dozen |
|------|------------|-------------------|-----------|
| 2304 | 1 5/8 | For Mortise Locks | \$3.96 |
| 2305 | 1 5/8 | For Rim Locks | 3.96 |
| 2306 | 3/8 | For Mortise Locks | 5.16 |
| 2307 | 3/8 | For Rim Locks | 5.16 |

KEYHOLE ESCUTCHEONS

Style 5187

Shield design; polished cast brass.



| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 0 | 1 1/8 | \$2.16 |
| 1 | 1 1/2 | 2.16 |
| 2 | 1 3/4 | 2.16 |

COMBINATION ESCUTCHEONS

Style 5193

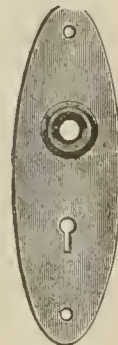
Oval, rounded edge, cast brass plate. Polished finish.

Per Dozen

No. 2392—Size 1 5/8x6 1/4 Inches; For
Locks Nos. 15, 16, 70 and 71.....\$10.32

No. 2393—Size, 1 5/8x4 7/8 Inches; For
Locks Nos. 15, 16 and 70..... 10.32

No. 2394—Size, 1 5/8x4 7/8 Inches; For
Lock No. 75..... 10.32



Style 5195

Beveled edge, cast brass plate, polished
finish. For use with locks Nos. 10, 13, 13 1/2,
14, 70, 73, 76 and 81.

Per Dozen

No. 2396—Size, 1 1/2x6 Inches.....\$10.32

†No. 2395—Size, 1 1/8x4 3/8 Inches.... 10.32

*No. 2397—Size, 1 1/8x4 1/8 Inches.... 10.32

†For No. 75 and No. 17 Locks.

*For No. 17 Lock

Note—When ordering specify number of
lock desired for.



WITH FLUSH DROP HANDLE

Style 5201

Beveled edge, cast brass plate; polished
finish. For use with No. 75 lock.

Per Dozen

No. 2399—Size 1 3/4x4 3/4 Inches.....\$27.12



FOR SLIDING DOORS

Style 5203

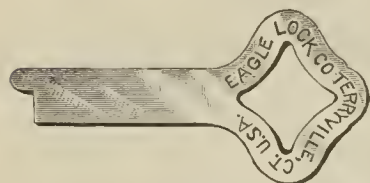
With flush key handle; cast brass; polished
finish.

Per Dozen

No. 2400—Size 2 1/2x6 3/4 Inches.....\$61.92



KEY BLANKS



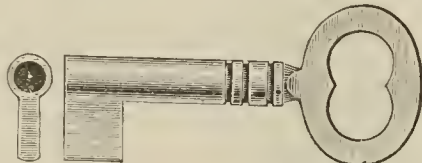
STEEL

Bright, rolled flat steel.
For cabinet locks.

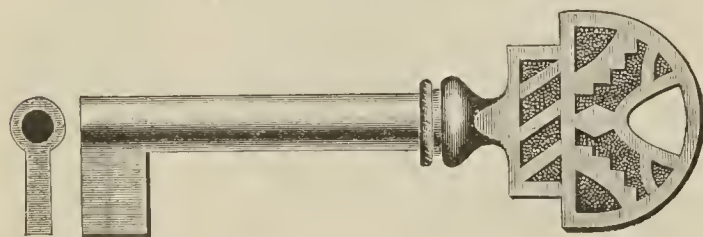
| Nos. | Length, Inches | Width Blade Inch | For Locks, Nos. | Per Gross |
|------|-------------------|---------------------|--------------------|--------------|
| 6080 | 1 1/2 | 1/4 | 2253 | \$4.80 |
| 6075 | 1 1/2 | 5/16 | 2254 | 4.80 |
| 6069 | 1 3/4 | 5/16 | 2255 | 4.80 |
| 6068 | 1 3/4 | 3/8 | 2256 | 4.80 |
| 9068 | 1 3/4 | 3/8 | 2257 | 4.80 |

CAST BRONZE

Flat bow. For cabinet locks and latches.

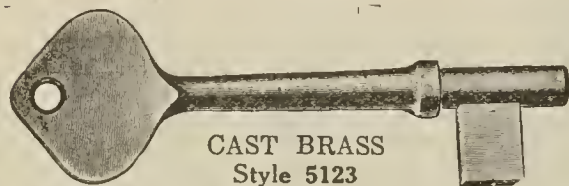


| Nos. | Distance Between Bow and Bit, Inches | Size Bit, Inch | For Locks, Nos. | Per Dozen |
|-------|---|-------------------|--------------------|--------------|
| 01473 | 3/4 | 1/4 x 1/4 | 2246 | \$3.42 |
| 1144 | 1 1/8 | 1/4 x 1/8 | 2249 | 3.42 |
| 6000 | 1 1/8 | 1/8 x 1/8 | 2250 | 3.42 |

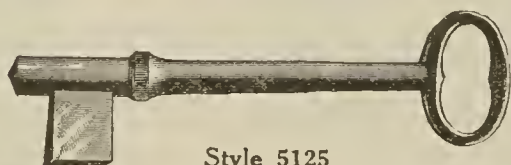


FANCY BRONZE—FOR CABINET LOCKS

| Nos. | Distance Between Bow and Bit, Inches | Size Bit, Inch | For Locks, Nos. | Per Dozen |
|------|---|-------------------|--------------------|--------------|
| 1459 | 1 1/2 | 5/16 x 3/8 | 2251 | \$3.42 |
| 1461 | 1 3/4 | 1/8 x 3/8 | 2252 | 3.42 |

CAST BRASS
Style 5123

| Nos. | Distance Between Bow and Bit, Inches | Size of Bit, Inch | For Lock, Nos. | Per Dozen |
|------|---|----------------------|------------------------|--------------|
| 2270 | 2 1/8 | 1/8 x 1/8 | ..... | \$5.16 |
| 2271 | 2 5/8 | 1/8 x 1/2 | ..... | 5.16 |
| 2275 | 1 1/2 | 3/8 x 1/8 | 81 | 5.16 |
| 2276 | 1 1/4 | 3/8 x 1/8 | 76-176 1/2 | 7.20 |
| 2277 | 2 1/8 | 1/8 x 1/2 | ..... | 7.20 |
| 2279 | 2 | 1/2 x 1/8 | 25-26 | 7.20 |
| 2280 | 2 3/8 | 1/2 x 1/8 | ..... | 7.20 |
| 2281 | 2 1/4 | 1/8 x 1/8 | ..... | 7.20 |
| 2282 | 2 1/4 | 1/2 x 1/8 | 2201-2209-2221-2227-29 | 10.20 |



Style 5125

| Nos. | Distance Between Bow and Bit, Inches | Size Bit, Inch | For Locks, Nos. | Per Dozen |
|------|---|-------------------|--------------------|--------------|
| 2278 | 2 1/8 | 1/8 x 1/8 | 75 | \$7.20 |
| 2286 | 1 1/8 | 1/8 x 3/8 | 70-170-112 | 5.16 |
| 2288 | 1 3/4 | 1/8 x 1/8 | 18 | 5.16 |
| 2291 | 1 1/8 | 1/2 x 1/2 | 20 | 5.16 |
| 2292 | 1 1/8 | 3/8 x 1/8 | 71 | 5.16 |
| 2293 | 1 1/2 | 1/4 x 1/8 | 46-2215 | 5.16 |
| 2294 | 1 3/4 | 1/8 x 3/8 | 17 | 5.16 |
| 2295 | 2 1/8 | 1/8 x 1/8 | 13-13 1/2-113 1/2 | 5.16 |
| 2297 | 2 5/8 | 1/8 x 1/2 | ..... | 5.16 |
| 2303 | 3 1/8 | 3/4 x 5/8 | ..... | 8.40 |
| 2304 | 2 | 3/4 x 5/8 | ..... | 8.40 |
| 2312 | 2 3/8 | 5/8 x 1/2 | ..... | 8.40 |
| 2315 | 2 1/2 | 1/8 x 1/8 | ..... | 8.40 |
| 2316 | 2 1/2 | 1/8 x 1/8 | ..... | 8.40 |

MENDING STRAPS

BRASS

Made of wrought brass with countersunk screw holes and rounded ends.



| Nos. | Size, Inches | Per Gross |
|------|--------------|-----------|
| 416 | 1 1/2 x 1/2 | \$5.50 |
| 417 | 2 x 1/2 | 7.90 |
| 418 | 3 x 1/2 | 9.66 |
| 419 | 4 x 1/2 | 10.35 |
| 420 | 6 x 3/4 | 24.80 |

Thirty-six in a Box

MIRROR PLATES

Style 5391

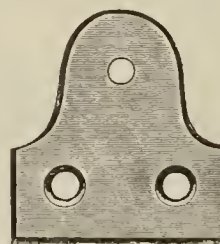
Wrought brass; plain finish.

| No. | Size, 2 x 3/4 Inches | Per Gross |
|----------|----------------------|-----------|
| No. 1262 | Size, 2 x 3/4 Inches | \$4.25 |



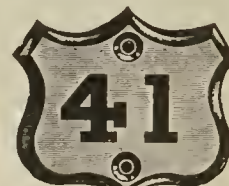
Style 5393

Wrought brass; plain finish.



| Nos. | Size, Inches | Per Gross |
|------|---------------|-----------|
| 1258 | 1 1/8 x 1 1/8 | \$4.10 |
| 1259 | 1 1/4 x 1 1/4 | 4.55 |
| 1260 | 1 1/8 x 1 1/8 | 5.45 |
| 1261 | 1 3/4 x 1 3/4 | 6.85 |

NUMBER PLATES



Oblong—Style 5977

Shield—Style 5975

Made in oblong shield or oval shape with numbers as specified; white porcelain with black lettering or with gold edged black lettering.

| Nos. | Size, Inches | Shape | Per Hundred | |
|------|---------------|--------|----------------|---------|
| | | | Black and Gold | Black |
| 4129 | 3 x 2 3/4 | Shield | \$..... | \$..... |
| 4130 | 2 1/2 x 2 1/2 | Shield | ..... | ..... |
| 4131 | 2 1/8 x 2 | Shield | ..... | ..... |
| 4132 | 1 1/4 x 1 1/4 | Shield | ..... | ..... |
| 4133 | 3 1/2 x 1 1/2 | Oblong | ..... | ..... |
| 4134 | 2 3/4 x 1 1/4 | Oblong | ..... | ..... |
| 4135 | 2 1/4 x 1 | Oblong | ..... | ..... |
| 4136 | 1 3/4 x 3/4 | Oblong | ..... | ..... |
| 4137 | 3 1/4 x 1 1/2 | Oval | ..... | ..... |
| 4138 | 2 3/4 x 1 1/4 | Oval | ..... | ..... |
| 4139 | 2 1/4 x 1 | Oval | ..... | ..... |
| 4140 | 1 3/4 x 3/4 | Oval | ..... | ..... |

Prices on Application

TIME AND TOOL CHECKS



Made of solid brass, price includes black lettering and numbering and varies according to the quantity ordered.

| Nos. | Width, Inches | Per Hundred |
|------|---------------|-------------|
| B58 | 1 1/2 | \$..... |
| B59 | 1 1/8 | ..... |

Note: Other shapes and sizes can also be furnished to order. The above illustrations only show a few of the shapes we can supply.

Prices on Application

TIME AND TOOL CHECKS



Made of solid brass; price includes black lettering and numbering and varies according to the quantity ordered.

| Nos. | Diameter, Inches | Per Hundred |
|------|------------------|-------------|
| B3 | 1 $\frac{1}{8}$ | \$..... |
| B5 | 1 $\frac{1}{2}$ | ..... |

All Above, Prices on Application

NAME PLATES

PORCELAIN
Style 5981

Made to order with name as specified; white porcelain with black lettering or with gold edged black lettering.

| Nos. | Size, Inches | Black and Gold | Black |
|------|-------------------|----------------|---------|
| 4141 | 5x1 $\frac{1}{4}$ | \$..... | \$..... |
| 4142 | 6x1 $\frac{1}{4}$ | ..... | ..... |
| 4143 | 7x1 $\frac{1}{2}$ | ..... | ..... |
| 4144 | 8x1 $\frac{1}{2}$ | ..... | ..... |
| 4145 | 9 1 $\frac{1}{2}$ | ..... | ..... |

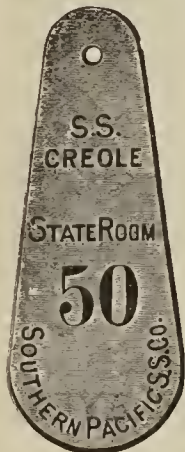
ENAMELED

Made to order with name as specified; white enameled on iron or copper.

| Size, Inches | Each |
|--------------------------|---------|
| 9x1 $\frac{1}{2}$ Iron | \$..... |
| 9x1 $\frac{1}{2}$ Copper | |

Note: Name plates also supplied in copper, brass and white metal.

KEY TAGS



LONG

Style 5981

Made of solid brass or strong, red fibre. Furnished plain unless otherwise specified; lettered to order only.

| Material | Per Hundred |
|-------------|-------------|
| Plain Brass | \$..... |
| Plain Fibre | |

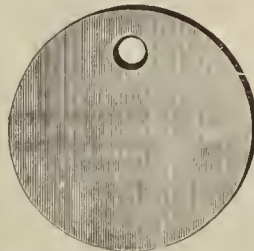
Prices on Application

ROUND—PLAIN EDGE

Made of solid brass or strong, red fibre. Furnished plain unless otherwise specified; lettered to order only—price upon application.

| Material | Per Hundred |
|-------------|-------------|
| Plain Brass | \$..... |
| Plain Fibre | |

Prices on Application

ROUND—SCALLOPED
EDGE
Style 5783

Made of solid brass or strong, red fibre. Furnished plain unless otherwise specified; lettered to order only.

| Material | Per Hundred |
|-------------|-------------|
| Plain Brass | \$..... |
| Plain Fibre | |



PUSH PLATES

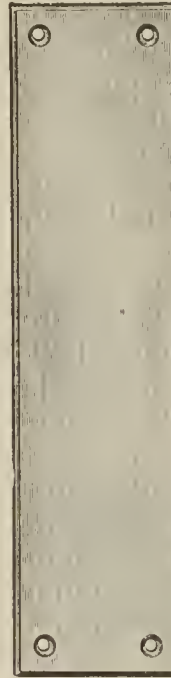
CAST BRASS
Style 5449

Made of solid cast brass; narrow beveled edges; countersunk screw holes in each corner; polished finish.

Length, 15 Inches; Width, 3 $\frac{1}{2}$ Ins. **\$8.00**

Note—Can be furnished in any size, screw holes as needed.

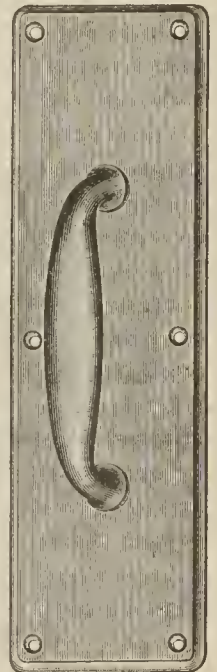
With Screws to Match



DOOR PULLS

CAST BRASS

Made of solid cast brass; has narrow beveled edges; countersunk screw holes in each corner; heavy, well-shaped handle securely bolted to plate.



Length of Plate, 15 Inches; Width of Plate, 3 $\frac{1}{2}$ Inches; Length of Handle, 5 $\frac{1}{4}$ Inches.....**\$11.00**

With Screws to Match

KICK PLATES

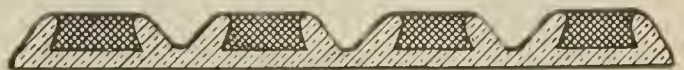


Style 5461

Made of brass; straight edge; polished finish; can be furnished in any size with screw holes as needed.

Prices on Application

STEP PLATES



MASON—SAFETY TREADS

Base is composed of hard brass with dovetailed grooves filled with carborundum.

Prices Quoted Upon Receipt of Definite Specifications

STEP PLATES

Style 5363

Made of solid cast brass; has a hole in center and each end

for countersunk screws; plain finish.

| Length, Inches | Width, Inches | Thickness, Inch | Each |
|----------------|-----------------|-----------------|--------|
| 18 | 1 $\frac{1}{2}$ | $\frac{1}{4}$ | \$2.50 |
| 18 | 2 | $\frac{1}{4}$ | 2.80 |
| 18 | 2 $\frac{1}{2}$ | $\frac{1}{4}$ | 3.50 |
| 18 | 3 | $\frac{1}{4}$ | 4.00 |

CABIN DOOR HOOKS



Style 5363

Cast brass hooks and oval plates; ornamental design; highly polished finish.

| Nos. | Size, Inches | Per Dozen | Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|------|--------------|-----------|
| 2655 | 1½ | \$4.32 | 2660 | 4 | \$8.76 |
| 2656 | 2 | 5.18 | 2661 | 5 | 10.28 |
| 2657 | 2½ | 6.04 | 2662 | 6 | 12.08 |
| 2658 | 3 | 6.70 | 2663 | 8 | 14.80 |
| 2659 | 3½ | 8.30 | 2664 | 10 | 16.50 |



Style 5365

Extra heavy pattern; polished, cast brass.

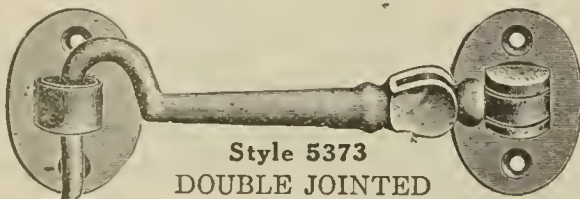
| Nos. | Size, Inches | Per Dozen | Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|------|--------------|-----------|
| 2665 | 2 | \$6.90 | 2670 | 5 | \$14.00 |
| 2666 | 2½ | 8.30 | 2671 | 6 | 15.00 |
| 2667 | 3 | 9.40 | 2672 | 8 | 19.20 |
| 2668 | 3½ | 10.30 | 2673 | 10 | 22.60 |
| 2669 | 4 | 12.00 | 2674 | 12 | 30.00 |



Style 5367

Extra heavy; cast brass hooks and heavy oval plates; polished finish.

| Nos. | Size, Inches | Per Dozen | Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|------|--------------|-----------|
| 2675 | 3 | \$20.00 | 2679 | 10 | \$50.00 |
| 2676 | 4 | 22.00 | 2680 | 12 | 56.00 |
| 2677 | 6 | 29.00 | 2681 | 14 | 70.00 |
| 2678 | 8 | 40.00 | 2682 | 16 | 85.00 |



Style 5373

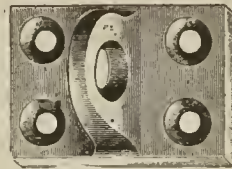
DOUBLE JOINTED

Extra heavy; cast brass; polished finish.

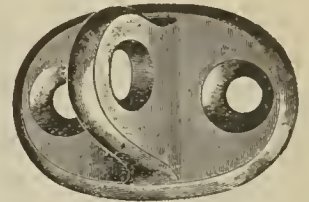
| Nos. | Size, Inches | Per Dozen | Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|------|--------------|-----------|
| 2687 | 2 | \$16.80 | 2694 | 8 | \$34.60 |
| 2688 | 2½ | 16.80 | 2695 | 10 | 41.70 |
| 2689 | 3 | 17.30 | 2696 | 12 | 45.40 |
| 2690 | 4 | 18.90 | 2697 | 14 | 60.50 |
| 2691 | 5 | 20.80 | 2698 | 16 | 73.44 |
| 2692 | 6 | 22.70 | .... | .. | .... |

Hardware and supplies for every type of craft are available for immediate delivery from our stock.

PLATE STAPLES



Style 5389



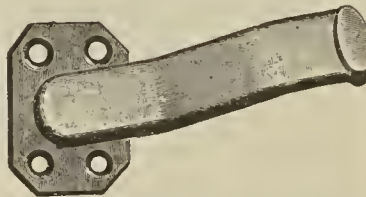
Style 5387

Cast brass, polished natural brass finish.

| Nos. | For Hook Nos. | Per Dozen | Nos. | For Hook Nos. | Per Dozen |
|------|----------------|-----------|------|-----------------|-----------|
| 2723 | 2655-2656 | \$3.60 | 2726 | 2665-2674 | \$5.40 |
| 2724 | 2657-2659 | 3.60 | 2730 | 2675-2682 | 8.10 |
| 2725 | 2665-2674 | 5.40 | 2731 | 2689-2698 | 10.80 |
| Nos. | For Hasps Nos. | Per Dozen | Nos. | For Hasps Nos. | Per Dozen |
| 2732 | 0 | \$3.60 | 2741 | 100 | \$3.60 |
| 2735 | 10 | 4.80 | 2742 | 101 | 3.60 |
| 2736 | 11 | 4.80 | 2744 | 103 | 6.00 |
| 2739 | 20 | 6.00 | 2746 | 8-in. N.Y. Pat. | 4.80 |
| 2740 | 21 | 6.60 | 2749 | *12 | 9.00 |

*Button staple type.

SLIDING DOOR HOOKS



FOR SINGLE DOORS

Style 5377

Cast brass; highly polished, natural brass finish. Polished, cast brass strike.

Per Dozen

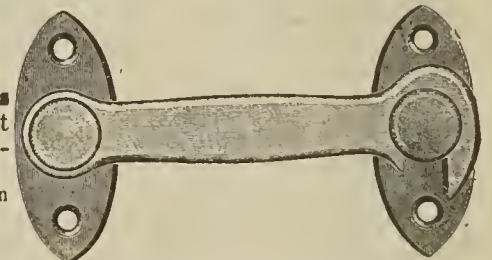
No. 2702—
Size, 3
Inches\$14.05

FOR DOUBLE DOORS

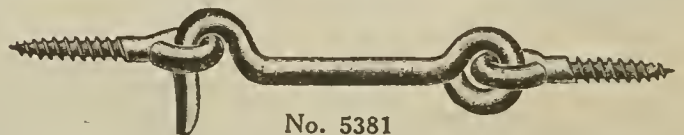
Style 5379

Also used as shutter bars. Cast brass, polished finish.

No. 2703—
Size, 5
Inches\$17.75



WIRE GATE HOOKS AND EYES



No. 5381

Brass wire or wrought steel wire, Cadmium.

| Size, Inches | Per Gross Cadmium | Per Gross Brass | Size, Inches | Per Gross Cadmium | Per Gross Brass |
|--------------|-------------------|-----------------|--------------|-------------------|-----------------|
| 1½ | \$1.75 | \$6.50 | 6 | \$7.50 | \$27.50 |
| 2 | 2.00 | 7.50 | 8 | 9.00 | 35.00 |
| 2½ | 2.50 | 10.00 | 10 | 10.00 | 40.00 |
| 3 | 3.00 | 12.50 | 12 | 12.50 | 45.00 |
| 3½ | 3.50 | 15.00 | 14 | 15.00 | .... |
| 4 | 4.00 | 17.50 | 16 | 17.50 | 50.00 |
| 5 | 6.00 | 22.50 | .. | ..... | ..... |

HOOKS AND PLATE STAPLES

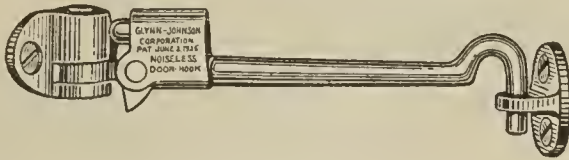


Style 2722

Wrought steel; hot galvanized hook, plates and staples.

| Size, Inches | Per Gross | Size, Inches | Per Gross |
|--------------|-----------|--------------|-----------|
| 3 | \$39.10 | 5 | \$51.00 |
| 4 | 45.90 | 6 | 57.80 |

CABIN DOOR HOOKS



TIEBOUT—NOISELESS

Has a plunger that actuates against the holding bracket and is a perfect take-up that eliminates the rattle and noise occasioned by wind and water conditions and avoids the possibility of the hook jumping out of the eye bracket. Hook point is also tapered and snugly fits hole in eye bracket. Is equipped also with pivot hinge extension that does not permit the hook point to come in contact with the wood work when not hooked. Made of bronze in polished and brushed finishes.

| Nos. | Length, Inches | Per Doz. | Nos. | Length, Inches | Per Doz. |
|------|----------------|----------|------|----------------|----------|
| T3 | 3 | \$24.00 | T 6 | 6 | \$30.50 |
| T4 | 4 | 26.50 | T 8 | 8 | 34.00 |
| T5 | 5 | 28.50 | T10 | 10 | 36.00 |

DOOR HOLDERS

TIEBOUT—OVERHEAD DOOR HOLDER AND SHOCK ABSORBER



Installed at the top of door, it holds securely under all conditions, cabin, exit, entrance and vestibule doors from 90 to 125 degrees as desired. Enclosed shock absorber takes up the slam and eliminates the strain on doors and hinges. A simple, positive locking arrangement in the joint discs, operated by turning the tee handle, will hold door open when desired. Made of phospher bronze with polished or brushed finish.

Each

No 01—For 24 to 28 Inch Doors; Wgt. Ea., 9 Lbs. \$12.00

No. 02—For Doors 30 Inches and Wider..... 12.00

Extra for nickel plating, add \$1.50.

DOOR HOLDERS



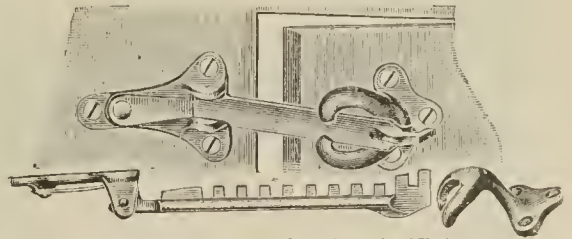
TIEBOUT—HERCULES

Foolproof and silent in operation. Easily operated; arm is pushed down or raised with the foot; no springs or mechanism to get out of order. Foot is equipped with a special compound, renewable rubber shoe that renders remarkably long service and that does not mar any kind of floor or floor covering. Made entirely of cast bronze or brass with polished or brushed finish. Weight each, 1 pound.

| Nos. | Type of Door | Floor Clearance, Inches | Each |
|------|--------------|-------------------------|--------|
| 3 | Inside | 1½ | \$1.75 |
| 4 | Medium | 2½ | 1.85 |
| 5 | Heavy | 3½ | 2.00 |
| *4S | Medium | 2½ | 1.25 |

*Cast brass, emery finish.

DOOR HOLDERS



BLANEY—CAST BRONZE

Door holder and guard. Forms an extremely secure lock which cannot be tampered with from outside. Holds door open in any one of ten positions. Made of cast bronze; polished natural bronze finish.

Each

Blaney—Size, 9 Inches\$3.40

SIDE PATTERN

Style 5401

Cast brass base to screw on wall, projecting, 2½ inches; spring brass catch, polished natural brass finish.

Per Dozen

No. 2752—Weight per Dozen, 3½ Lbs.\$10.80

FLOOR PATTERN

Style 5403

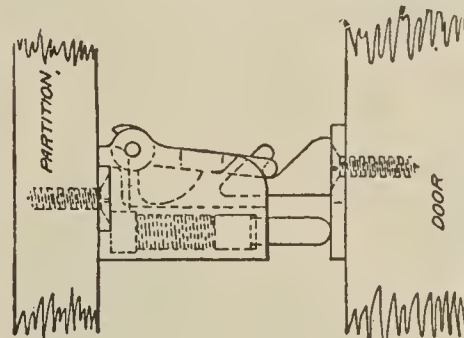
Cast brass base to screw to floor; height, 1½ inches; spring brass catch polished natural finish.

Per Dozen

No. 2753—Weight per Dozen, 4½ Lbs. \$12.00

AUTOMATIC DOOR HOLDERS

RAWLINGS PATENT



Style 5397

A positive automatic door holder for ship use. Cast bronze; in emery and polished bronze finishes. No. 2750 is standard size and No. 2751 for heaviest wood or metal doors.

| Nos. | Size, Inches | Each |
|------|--------------|--------|
| 2750 | 2¾ | \$2.50 |
| 2751 | 3¾ | 3.00 |

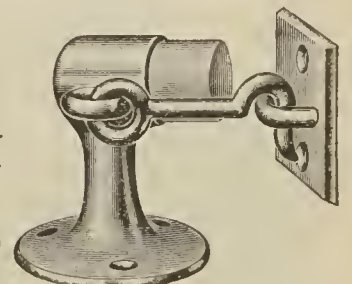
DOOR STOPS AND HOLDERS

CAST BRONZE
FLOOR PATTERN

Cast bronze; polished natural finish, with rubber button. Height above floor 3 inches.

Per Dozen

No. 2760.....\$29.40

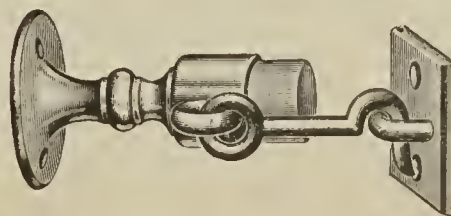


WALL PATTERN

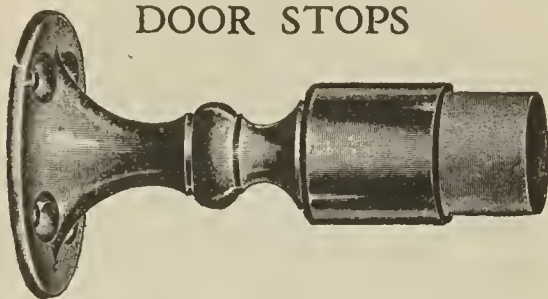
Cast bronze; polished natural brass finish, with rubber button. Projection from wall, 3¼ inches.

Per Dozen

No. 5415.....\$29.40



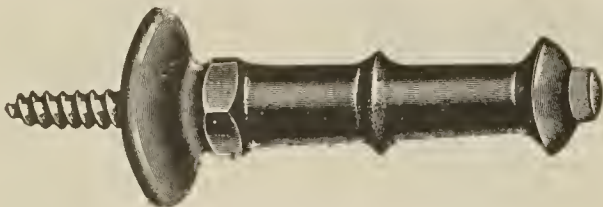
DOOR STOPS



CAST BRASS
PLAIN OR WITH HOOK AND PLATE
Style 5411

With large rubber bumper and 2 3/8 inch diameter, drilled base plate for wood screw fastening. Cast brass, polished natural brass finish.

| | |
|---|-----------|
| | Per Dozen |
| No. 2756—Plain; Projection, 3 3/8 Inches..... | \$23.85 |
| No. 2757—With Hook and Plate..... | 30.60 |



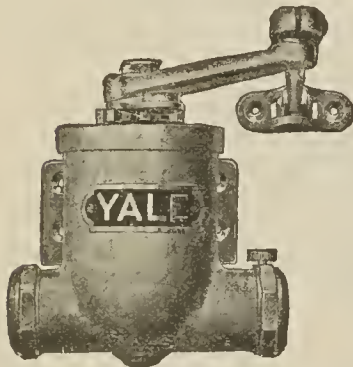
CAST BRASS—SCREW TYPE
Style 5409

Polished cast brass with steel screw and rubber bumper. Base diameter, 1 5/8 inches. Side pattern.

| | |
|-------------------------------------|-----------|
| | Per Dozen |
| No. 2755A—Projection, 3 Inches..... | \$9.00 |

DOOR CLOSERS

YALE
Style 7177



Case of cast iron finished in gold bronze. Right or left hand without change. By a turn of a regulating screw, can be adjusted to any draught. The spring is light, long and resilient. The tension is evenly distributed over twenty coils of flat wire which are so made that they do not touch each other, eliminating internal friction and permitting the full power of the spring to be exerted in performing its function. The crank driver regulates the operation of the closer causing it to close the door quickly until it comes within a few inches of the jamb when it closes completely, slowly and noiselessly.

| Nos. | For | Weight Each, Lbs. | Each |
|-------------------------------|----------------------------|-------------------|--------|
| 71 | Screen Doors | 4 1/2 | \$6.95 |
| 72 | Light Doors | 8 | 9.10 |
| 73 | Medium Size Doors | 10 3/16 | 10.75 |
| 74 | Heavy Inside Doors | 13 1/4 | 12.85 |
| 75 | Heavy Outside Doors | 17 1/4 | 17.15 |
| 76 | Extra Heavy Outside Doors | 20 1/2 | 21.50 |
| With Holder Device—Style 7179 | | | |
| 171 | Screen or Very Light Doors | 5 3/4 | 11.25 |
| 172 | Light Inside Doors | 8 1/4 | 10.75 |
| 173 | Medium Inside Doors | 10 1/2 | 12.40 |
| 174 | Heavy Inside and Regular | | 14.50 |

Note—This is a device for the control of single acting doors, i. e., doors which open in one direction only. At a slight additional cost this closer may be had, so constructed that it will hold the door open in any desired position. Regularly furnished in gold bronze finish. At the same price, when so ordered in silver-bronze or imitation Bowser-Barff finish. At an additional price, they will be furnished plated in bronze, brass, nickel, copper, oxidized silver, or any other finish, either polished or unpolished; or in brass or bronze, if desired.

DOOR BUTTONS

Style 5511



Cast brass; solid; polished natural brass finish.

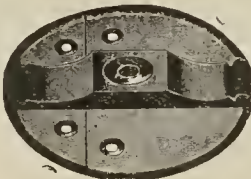
| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 2796 | 1 1/2 | \$1.24 |
| 2797 | 1 3/4 | 1.65 |
| 2798 | 2 | 1.86 |
| 2800 | 2 1/2 | 3.10 |
| 2801 | 3 | 4.54 |

Style 5517

Cast iron; hot galvanized finish.



| Nos. | Size, Inches | Weight per Gross, Lbs. | Per Gross |
|------|--------------|------------------------|-----------|
| 2809 | 2 | 6 1/4 | \$3.10 |
| 2810 | 2 1/2 | 9 | 6.20 |



WITH PLATES
Style 5513

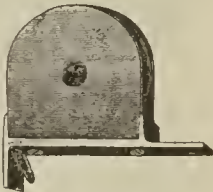
Solid cast brass buttons and plates. Polished natural brass finish.

| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|--------------|------------------------|-----------|
| 2802 | 1 1/2 | 5 5/8 | \$2.68 |
| 2803 | 1 3/4 | 7 7/8 | 3.50 |
| 2804 | 2 | 15 5/8 | 4.12 |
| 2806 | 2 1/2 | ... | 7.22 |
| 2807 | 3 | ... | 10.32 |

SPRING SASH BALANCES

MARINE

Cast bronze; polished face; used by U. S. Navy and leading ship builders. Made in side and top patterns; side pattern is mortised into same position as pulley; overhead pattern permits the use of narrow mullions, or dividing strips, and is used extensively where the maximum amount of light is desired; all parts are carefully fitted; has an aluminum bronze tape on a revolving drum, operated by a clock spring of the finest steel; all moving parts are encased; there is nothing to rub on the woodwork or interfere with the action of the spring, nor can the parts be bound by squeezing the balance into a tight mortise; equipped with new style tape hook which accomplishes installation or removal almost instantly without disturbing stops, sash or frame; each set consists of two balances, one pair for the weight of the sash; each balance is tested by certified dead weight and will carry the weight of the sash intended.



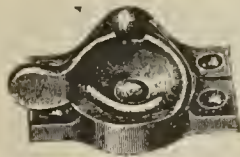
Side Top

| Nos. | Width of Face, Inches | Depth of Case, Inches | Length Tape, Inches | For Sash Weighing, Lbs. | Per Pair |
|------|-----------------------|-----------------------|---------------------|-------------------------|----------|
| 8 | 3/4 | 2 3/4 | 30 | 6 to 8 | \$6.00 |
| 10 | 3/4 | 2 3/4 | 30 | 8 to 10 | 6.00 |
| 12 | 7/8 | 3 | 36 | 10 to 12 | 6.20 |
| 14 | 7/8 | 3 | 36 | 12 to 14 | 6.40 |
| 16 | 7/8 | 3 3/8 | 36 | 14 to 16 | 6.60 |
| 18 | 7/8 | 3 3/8 | 36 | 16 to 18 | 6.80 |
| 20 | 7/8 | 3 3/8 | 36 | 18 to 20 | 7.20 |
| 23 | 1 1/8 | 3 1/2 | 36 | 20 to 23 | 8.00 |
| 26 | 1 1/8 | 3 1/2 | 36 | 23 to 26 | 8.40 |
| 29 | 1 1/8 | 3 1/2 | 36 | 26 to 29 | 8.60 |
| 32 | 1 1/6 | 3 1/2 | 36 | 29 to 32 | 12.00 |
| 35 | 1 1/6 | 3 3/16 | 36 | 32 to 35 | 12.60 |
| 38 | 1 1/6 | 3 3/16 | 36 | 35 to 38 | 13.00 |
| 41 | 1 1/6 | 3 3/16 | 36 | 38 to 41 | 13.40 |
| 44 | 1 1/2 | 4 3/8 | 36 | 41 to 44 | 16.00 |
| 47 | 1 1/2 | 4 3/8 | 36 | 44 to 47 | 16.80 |
| 50 | 1 1/2 | 4 3/8 | 36 | 47 to 50 | 17.10 |

Note—In ordering give weight of sash, length or run and state if side or top pattern. Can be furnished in all finishes.

SASH CATCHES

CAST BRONZE



Style 5611

Cast bronze; polished finish; for double sash windows.

No. 2896—Size, 1x2 $\frac{5}{8}$ Inches.....\$12.00

Per Dozen

SLIDING SASH CATCHES



CAST BRASS
Style 5619

Cast brass; for light sliding sash; made right and left hand.

No. 1—Size, 1 $\frac{1}{8}$ x $\frac{1}{2}$ Inches.....\$4.15

Per Dozen

STOPS ONLY

No. 2898 1.05

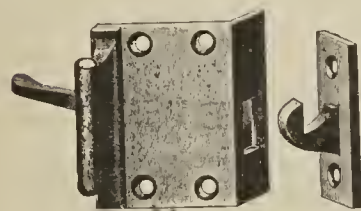
Style 5623

Cast brass; polished finish; for cabin and car windows..

Without Lip

| Nos. | Size, Inches | Per Dozen |
|------|----------------------------------|-----------|
| 10 | 1 $\frac{1}{8}$ x1 $\frac{3}{4}$ | \$18.10 |
| 110 | 1 $\frac{3}{4}$ x1 $\frac{3}{4}$ | 19.60 |

With Lip

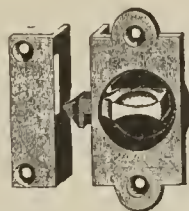


SURFACE
Style 5625

Cast brass; polished finish.

Per Dozen

No. 2899—Size, 1 $\frac{1}{4}$ x2 $\frac{3}{4}$ Inches....\$20.65



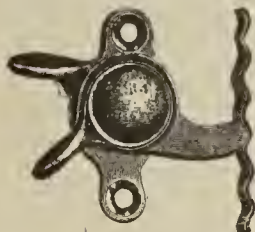
Style 5609

Cast bronze; polished finish; made right and left hand; illustration shows right hand; 14 inches of crimped brass strip with each catch.

Per Dozen

No. 2895—Size, 1 $\frac{1}{4}$ x1 Inches..\$25.80

Extra Strips, Each..... .75

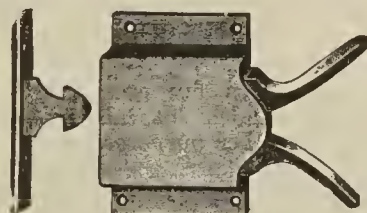


Style 5621

Cast brass; polished finish.

Per Dozen

No. 11—Size, 2 $\frac{1}{4}$ x1 $\frac{1}{2}$ Inches\$20.65



CAR WINDOW CATCHES

CAST BRASS
Style 5605

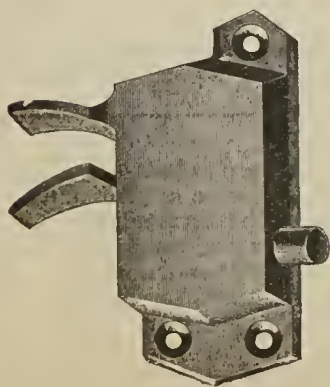
Cast brass; polished finish; made in right and left hand; illustration shows right hand; extra stops can also be furnished.

Per Dozen

No. 2—Size, 2 $\frac{1}{4}$ x1 $\frac{1}{2}$ Ins...\$12.00

Extra Stops .. 2.40

18-Inch Strips, Each 1.50



SIDE SASH LOCKS

Style 5613

Cast brass; polished finish; made in right and left hand. Illustration shows right hand. Furnished in regular and extra heavy types.

Regular

| Nos | Size, Inches | Per Dozen |
|-----|----------------------------------|-----------|
| 1 | 2 $\frac{5}{8}$ x1 $\frac{1}{8}$ | \$8.10 |
| 2 | 3 $\frac{1}{8}$ x1 $\frac{1}{2}$ | 12.15 |



ANTI-SASH RATTLERS

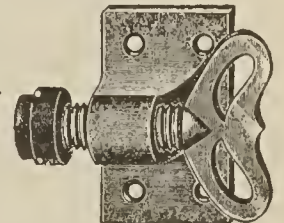
CAST BRASS
Style 5631

Cast brass; polished finished; leather tip prevents defacing of woodwork.

No. 81—Size of Base, 1x1 $\frac{3}{4}$ Inches

Per Dozen

Inches\$15.00



COMBINATION SASH LOCKS AND LIFTS

Style 5615

Cast brass; polished finish.

Per Dozen

No. 50—Size, 1 $\frac{1}{8}$ x1 $\frac{1}{4}$ Inches....\$15.50

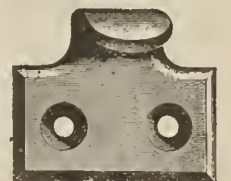


SASH LIFTS

Style 5639

Cast brass; polished natural finish. Furnished in regular and extra heavy types.

No. 2 is an extra heavy lift.



| Nos. | Size, Inches | Per Dozen |
|------|-----------------------------------|-----------|
| 1 | 1 $\frac{1}{2}$ x1 $\frac{1}{16}$ | \$4.50 |
| 2 | 1 $\frac{3}{4}$ x1 | 7.25 |

Regular

Size, Inches

1 $\frac{1}{2}$ x1 $\frac{1}{16}$ 1 $\frac{3}{4}$ x1

Per Dozen

\$4.50

7.25

ANGLE PATTERN

Style 5615

Used where sash drops into pocket; cast brass; polished finish.

Per Dozen

No. 2903—For $\frac{1}{2}$ Inch Sash; Size $\frac{3}{4}$ x1 $\frac{1}{4}$ Inches..... \$7.75



SASH PULLEYS

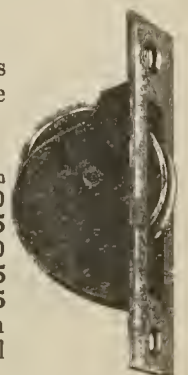
REGULAR

Style 5593

Cast brass, polished finish. Wheel has round groove for cord; square end face, axle riveted.

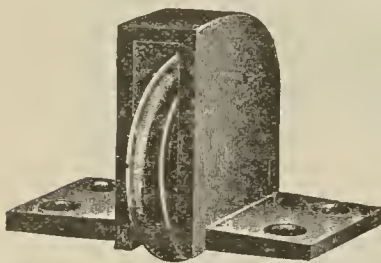
| Size, Nos. | Diameter Sheave, Inches | Size Face, Inches | Per Dozen |
|------------|-------------------------|----------------------------------|-----------|
| 2875 | 1 $\frac{1}{4}$ | 3 $\frac{3}{8}$ x $\frac{7}{8}$ | \$9.30 |
| 2876 | 1 $\frac{1}{2}$ | 3 $\frac{3}{8}$ x $\frac{7}{8}$ | 11.35 |
| 2877 | 1 $\frac{3}{4}$ | 3 $\frac{3}{8}$ x $\frac{7}{8}$ | 12.40 |
| 2878 | 2 | 4 $\frac{1}{2}$ x1 $\frac{1}{8}$ | 18.55 |
| 2879 | 2 $\frac{1}{2}$ | 5 $\frac{1}{2}$ x1 $\frac{1}{4}$ | 30.95 |

Note—2-inch pulley can be furnished with square grooved sheave for chain on special order.



We specialize in Marine, Refrigerator and Cabinet Hardware and have facilities to handle special orders. Upon receipt of samples, specifications or blue prints we will be prompt in quoting our best prices consistent with high class service and workmanship.

PILOT HOUSE OR CENTER
SASH PULLEYS



Style 5591

For use with pilot house tiller lines and for center sash lines in large windows. Heavy cast brass housing and solid web grooved sheave. Sheaves with square grooves for tiller or sash chains can be furnished to order.

| Size, Nos. | Size Sheave, Inches | Size Plate, Inches | Per Dozen |
|------------|---------------------|--------------------|-----------|
| 1 | 3/8x1 1/2 | 1 5/8x2 5/8 | \$22.70 |
| 2 | 1/2x2 | 2 1/4x2 3/4 | 45.40 |

COMBINATION SASH HINGES

Cast brass; polished finish. Fitted with knurled head screws which lock window when closed and also serve as anti rattlers. Set consists of right and left spuds and two brackets fitted with adjusting screws.



No. 1918—Size Spud Base, 1 x 1 1/2 Inches; Size Bracket Base, 1/2 x 2 1/4 Inches; Weight per Set 3/8 Lb.. \$1.25

SASH RINGS OR PULLS



Style 5587

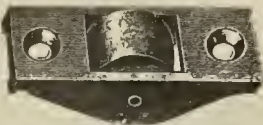
Cast brass; polished finish. For use with drop windows, seat lockers and chest covers.

| Nos. | Diameter Ring Inside, Inches | Size Plate, Inches | Per Dozen |
|------|------------------------------|--------------------|-----------|
| 2867 | 3/4 | 2 1/8x3/4 | \$6.20 |
| 2868 | 7/8 | 2 3/8x3/4 | 7.25 |
| 2869 | 1 | 2 1/2x3/4 | 9.30 |
| 2870 | 1 1/4 | 3 1/8x7/8 | 12.40 |

SASH ROLLERS

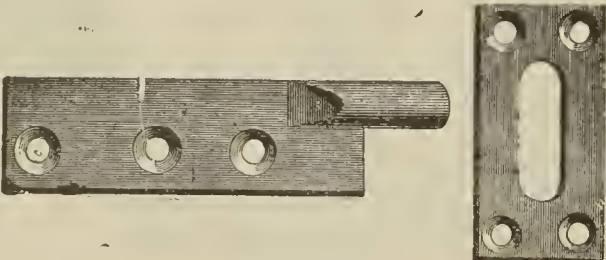
Style 5589

Cast brass; polished finish. For use with regular sash; sliding sash or doors, drawers, etc.



| Size, Nos. | Size Plate, Inches | Size Roller, Inches | Per Dozen |
|------------|--------------------|---------------------|-----------|
| 2871 | 3/4x1 3/4 | 1 1/8x 1/2 | \$11.35 |
| 2872 | 1 1/8x2 1/2 | 1 1/2x 3/4 | 13.45 |
| 2873 | 1 1/4x2 3/4 | 1 3/4x1 | 17.55 |
| 2874 | 1 1/2x3 3/4 | 3/4x1 3/4 | 27.85 |

SASH CENTERS



Style 5597

Cast brass; plain finish. For use on trunk or glass cabin windows swinging in.

With Plates

| Size Pin Plates, Inches | Size Flush Plates, Inches | Per Dozen Pairs |
|-------------------------|---------------------------|--|
| 2 5/8x3/4 | 1 3/4x1 1/8 | With Plates \$8.20 Without Plates \$7.00 |

SASH HOLDERS



Locking type sash holder; holds any size sash firmly. Has a 1 5/8x1 inch base plate that is narrow enough to fit any size carlin; the bolt is 2 1/2 inches long from center of eye to end of shank threaded 1 1/4 inches and fitted with wing nut. Oval end sash keeper plate is only 1x1 5/8 inches; small enough to be inconspicuous on even small sash. Cast brass, polished finish.

No. SH—Weight Each, 3 1/2 Ozs. \$1.25

HATCH RAISERS



Reversible for right or left hand sash, opening out. Has an oval rod; all parts made of brass; polished finish. Provided with holes for countersunk head wood screws.

| Length, Inches | Weight Each, Lbs. | Each |
|----------------|-------------------|--------|
| 8 | 1/2 | \$2.25 |
| 10 | 1 1/8 | 3.10 |

CASEMENT WINDOW ADJUSTERS



AUTOMATIC STAY

Will hold an average size casement sash, pivoted window, transom, linen closet, pantry and inside cabin doors in position at any angle through which it operates. Noiseless in operation, prevents slamming or rattling attachment can be made at the head or sill of casement or windows; on bottom or top hinged openings the attachment is at the side. To adjust friction for holding, the outer tube is turned; friction consists of steel tubular, enclosed spring and three babbitt shoes. Outside tube is 1/2 inch diameter; plunger bar is 3/8 inch brass rod. Furnished in polished and dull brass finishes. Length over all, when collapsed, 11 1/2 inches; projection from sash, 3/4 inch.

No. AS-01—Weight Each, 5/8 Lb. \$1.50



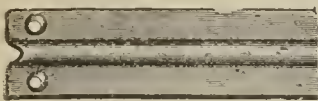
Cast brass, fine emery finish, adaptable for use on skylights, windshields, all types of casement windows and various other purposes.

| Length, Inches | Diameter Rod, Inches | Each |
|----------------|----------------------|--------|
| 8 | 3/8 | \$2.00 |
| 10 | 3/8 | 2.00 |
| 12 | 3/8 | 2.00 |

Heavier and Longer Sizes can be Furnished—Prices Upon Application

Price when permitted to dominate purchase consideration frequently means delay, disappointment and loss. Particularly is this true with marine fittings, which by the very nature of their use must reflect the price paid in the kinds of material and workmanship put into them, or for the strenuous service they must render.

SLIDING DOOR RAIL



WROUGHT BRASS

Plain wrought brass; with countersunk screw holes; furnished in six-foot lengths.

| Nos. | Size, Inches | Per Foot |
|------|----------------|----------|
| 2784 | $\frac{3}{4}$ | \$0.30 |
| 2786 | $1\frac{1}{8}$ | .44 |

CAST BRONZE

Solid cast bronze; raised center track is very heavy as it is cast solid. In two-foot lengths.

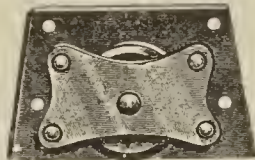
| No. | 1875—Width, $1\frac{1}{8}$ Inches | Per Foot |
|-----|-----------------------------------|----------|
| | | \$4.00 |

SLIDING DOOR SHEAVES

SIDE

Style 5455

Has side plate for attaching to side of door at the base. Made of solid brass throughout; polished finish.



| Nos. | Size Sheave, Inches | Size Plate, Inches | Per Dozen |
|------|-----------------------------------|------------------------------------|-----------|
| 0 | $\frac{1}{4} \times 1\frac{5}{8}$ | 2 x $3\frac{1}{2}$ | \$16.50 |
| 1 | $\frac{1}{2} \times 2\frac{1}{2}$ | 3 x 5 | 41.00 |
| 2 | $\frac{5}{8} \times 3$ | $3\frac{1}{4} \times 6$ | 46.35 |
| *8 | $\frac{5}{8} \times 3\frac{1}{4}$ | $5\frac{1}{2} \times 6\frac{1}{2}$ | 131.00 |

*Extra heavy type; made in three separate pieces; plate provided for both sides of door.



BOTTOM

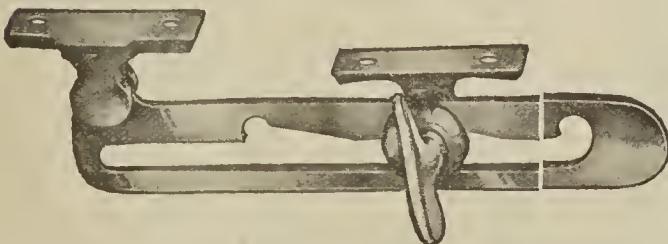
Style 5453

Fits into the bottom of door; has grooved base plate; made of solid cast brass; polished finish.

| Nos. | Size Sheave, Inches | Size Plate, Inches | Per Dozen |
|------|-----------------------------------|-----------------------------------|-----------|
| 3 | $\frac{3}{8} \times \frac{7}{8}$ | $\frac{3}{4} \times 2\frac{3}{8}$ | 7.25 |
| 4 | $\frac{1}{2} \times 1\frac{5}{8}$ | 1 x $3\frac{3}{4}$ | 14.45 |
| 5 | $\frac{1}{2} \times 2\frac{1}{2}$ | 1 x $4\frac{1}{2}$ | 25.80 |
| 6 | $\frac{1}{2} \times 3\frac{3}{4}$ | 1 x 6 | 29.95 |

Note—Can be furnished with square groove in wheel, to order.

WINDSHIELD ADJUSTERS

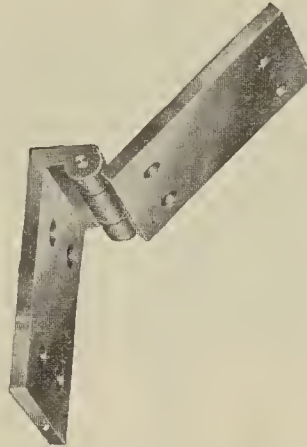


These fixtures are so designed that when they are in an upright position the windshield is automatically locked. They will draw the frame in position and hold it. This is accomplished by placing pivot points on a line. Will be supplied with any size offset plates or any degree of angle. Made of brass, polished or nickel plated finish. Size of top plate, $1\frac{1}{2} \times 3\frac{1}{2}$ inches; size of bottom plate, $1\frac{1}{2} \times 1\frac{1}{2}$ inches.

| Nos. | Notches | Length Arm, Inches | Finish, Brass | Center Slot to Bottom of Plate, Ins. | Weight per Dozen Pairs, Lbs. | Per Pair |
|------|---------|--------------------|---------------|--------------------------------------|------------------------------|----------|
| 30 | 4 | $6\frac{1}{2}$ | Polished | $1\frac{1}{16}$ | 9 | \$4.50 |
| 32 | 5 | 9 | Polished | $1\frac{3}{8}$ | $10\frac{1}{2}$ | 5.50 |

HATCH HINGES

POLISHED BRASS



This type of hinge is used with moulding No. 9058 and when installed only a very small section of joint is exposed.

Instead of using piano hinge, hatch is trimmed on four sides with moulding and these hinges are fitted underneath. Offset raises moulding on hatch clear of deck when opened. Width, $1\frac{3}{8}$ inches.

| No. | 9052 — Length, $2\frac{3}{4}$ Inches; Weight per Pair, $\frac{7}{8}$ Lb. | Per Pair |
|-----|--|----------|
| | | \$2.50 |

HATCH BRACKETS

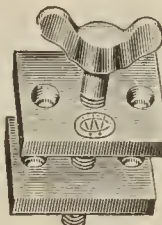
POLISHED BRASS

Very simple and noiseless. Hatch can be closed by pushing only, without reaching over to loosen locking screw or lifting supporting bar as is necessary in types used heretofore.



| No. | 406 — Length Closed, 10 Inches; Weight per Pair, 2 Lbs. | Per Pair |
|-----|---|----------|
| | | \$3.00 |

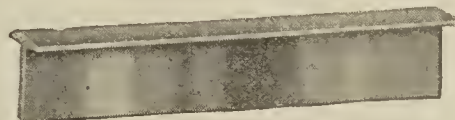
COMPANION HATCH BOLTS



Used on small boats to positively hold small companion hatches tight. Consists of two $1 \times 1\frac{1}{8}$ inch plates and a two inch thumb screw. Plates take No. 6 wood screws. Cast brass, full polished finish.

| No. | CHB—Wgt. Ea., 3 Ozs. | Each |
|-----|----------------------|--------|
| | | \$0.70 |

HATCH MOULDING



BRASS AND NICKEL SILVER

This type of moulding makes a very neat installation as it is fastened to edge of the hatch and does away with exposed screw heads, such as are used with flat brass hatch trim. Stops dripping and obviates the use of rain troughs on most installations. Projection from deck, $\frac{1}{8}$ inch.

| Width Surface, Inches | Depth, Inches | Weight per Foot, Ounces | Price per Foot |
|-----------------------|-----------------|-------------------------|-----------------------------------|
| $\frac{3}{4}$ | $1\frac{3}{16}$ | 10 | Brass \$0.50 Nickel Silver \$0.70 |

HATCH HANDLES

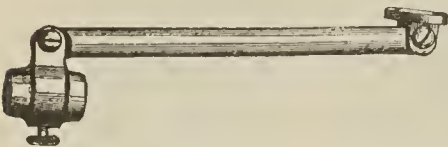


CAST BRASS AND NICKEL SILVER

Has narrow short ends, that do not cover any more of the hatch surface than is necessary. Height, $1\frac{1}{8}$ inches.

| No. | 185—Length, 5 Inches | Pol. Br. | N. S. | Chrome Plate |
|-----|----------------------|----------|--------|--------------|
| | | \$0.90 | \$1.00 | \$1.40 |

SKYLIGHT RAISERS



No. 482

An improved device for operating skylights. Made of brass throughout; polished

finish. Furnished in sets consisting of two raisers and two tubing supports; tubing is not included. Bored for countersunk head wood screws.

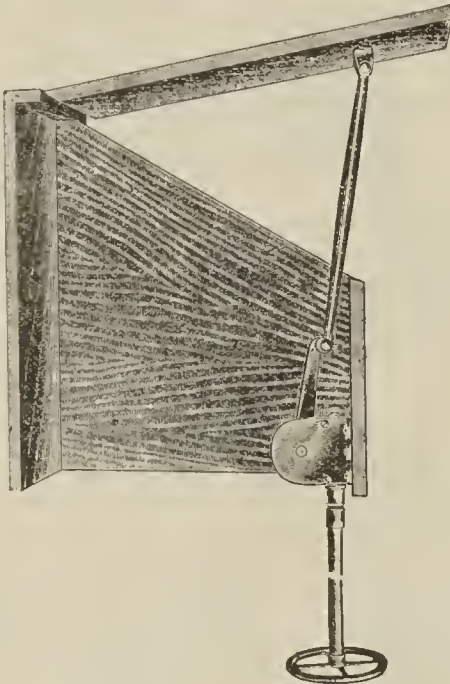
| Nos. | Size Tubing, Inches | Length, Inches | Size Screw, Nos. | Per Set |
|-------|---------------------|----------------|------------------|---------|
| 1 | 1 1/2 | 8 1/2 | 10 | \$7.25 |
| 1 1/2 | 5/8 | 8 1/2 | 10 | 7.25 |
| 2 | 3/4 | 10 1/2 | 12 | 8.50 |
| 2 1/2 | 7/8 | 10 1/2 | 12 | 8.50 |

WHEEL TYPE
Style 5809

For large or small skylights; skylight is raised or lowered by turning hand wheel.

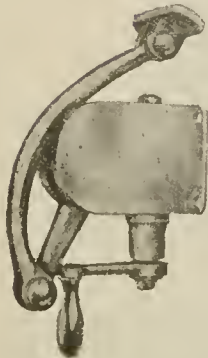
All parts are of cast bronze; polished finish. Provided with holes for countersunk screws.

Length of operating rod as shown below is standard and carried in stock; we are prepared to furnish these raisers with rods of any length, to order.



| Nos. | Length Operating Rod, Inches | Each |
|------|------------------------------|---------|
| 2976 | 12 | \$34.00 |
| 2977 | 48 | 47.65 |
| 2978 | 96 | 56.70 |

LEVER HANDLE
FOR YACHTS



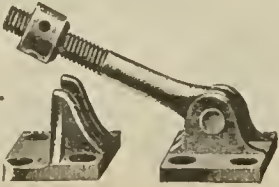
The best and most practical lift on the market. All working parts made of bronze. It is very quick, acting and is self-locking, screen can be used in the opening. Will lift a skylight lid weighing 100 lbs.

| No. | Each |
|----------|---------|
| No. 2980 | \$32.00 |

SKYLIGHT FASTENERS
Style 5811

All parts made of heavy, cast brass; polished finish. Provided with holes for countersunk head wood screws.

| Nos. | Size, Inches | Each |
|------|--------------|--------|
| 1 | 3/8x4 | \$2.75 |
| 2 | 1/2x5 | 6.90 |
| 3 | 3/4x6 | 10.35 |



SKYLIGHT QUADRANTS

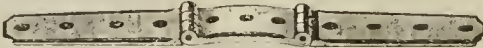


Style 5813

Made of solid cast brass; polished finish; furnished in pairs, one right and one left hand. Provided with holes for countersunk head wood screws. Illustration shows left hand quadrant.

| Size, Inches | Per Pair | Size, Inches | Per Pair |
|--------------|----------|--------------|----------|
| 5 | \$3.50 | 12 | \$7.25 |
| 8 | 5.25 | 16—Ex. Heavy | 18.00 |
| 10 | 6.50 | .. | .... |

SKYLIGHT HINGES



CAST BRASS

Cast brass, plain and polished finishes. Holes countersunk for flat head screws or bolts. Furnished in light, heavy and extra heavy patterns.

MOTOR BOAT PATTERN

Width, 1 inch; thickness, 1/8 inch; diameter knuckle, 1/2 inch.

| Nos. | Length Open, Inches | Between Joints, Inches | Length of Strap, Inches | Plain Per Pair | Polished Per Pair |
|------|---------------------|------------------------|-------------------------|----------------|-------------------|
| 2591 | 11 | 2 | 4 1/2 | \$1.80 | \$3.00 |
| 2592 | 11 3/4 | 2 1/2 | 4 1/2 | 1.90 | 3.10 |
| 2593 | 12 | 3 | 4 1/2 | 2.00 | 3.15 |
| 2594 | 12 3/4 | 3 1/2 | 4 1/2 | 2.10 | 3.40 |
| 2595 | 13 | 4 | 4 1/2 | 2.20 | 3.50 |
| 2597 | 16 1/4 | 5 | 5 1/2 | 3.50 | 4.95 |
| 2599 | 17 | 6 | 5 1/2 | 3.75 | 5.25 |



SHIP OR HEAVY PATTERN

Width, 1 1/4 inches; thickness, 1/4 inch; diameter knuckle, 3/4 inch.

| Nos. | Length Open, Inches | Between Joints, Inches | Plain Per Pair | Polished Per Pair |
|-------|---------------------|------------------------|----------------|-------------------|
| 2600 | 25 | 5 | \$9.30 | \$16.00 |
| 2601 | 20 | 6 | 8.50 | 14.62 |
| 2602 | 26 | 6 | 9.30 | 16.00 |
| 2603 | 30 | 6 | 10.25 | 17.65 |
| 2604 | 37 | 7 | 10.50 | 18.05 |
| 2605 | 28 | 8 | 10.00 | 17.20 |
| 2606 | 32 | 8 | 10.50 | 18.05 |
| 2607 | 38 | 8 | 11.25 | 19.35 |
| 2608 | 34 | 10 | 11.25 | 19.35 |
| *2609 | 37 | 7 | 15.00 | .... |

* Heavy; width, 2 inches; thickness, 3/8 inch.

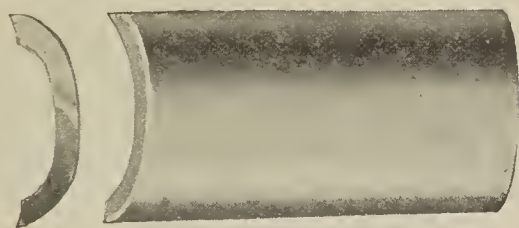


POLISHED BRASS

A new type hinge that makes possible a water-tight skylight when used with special skylight; trough and hook brass; very substantial and smooth working; hinges installed inside; cut shows half pair. Width of flange, 5 inches.

| No. | Per Pair |
|----------------------------------|----------|
| No. 4800—Weight per Pair, 5 Lbs. | \$5.25 |

FENDER MOULDING



No. 227

Moulding is extruded brass and hollow shaped with flat section so that edges of countersunk screw head will not project. Contact edges are tapered so that they will slightly imbed themselves in the planking making a neat fit. Can be easily bent to suit any curve. Projection, $\frac{1}{8}$ inch.

| Outside Width, Inches | Projection, Inches | Weight per Foot, Lbs. | Price per Foot | |
|-----------------------|--------------------|-----------------------|----------------|---------------|
| | | | Brass | Nickel Silver |
| $\frac{5}{8}$ | $\frac{5}{32}$ | $\frac{1}{4}$ | \$0.22 | \$0.35 |
| 1 | $\frac{5}{16}$ | $\frac{1}{2}$ | .40 | .60 |
| $1\frac{1}{4}$ | $\frac{3}{8}$ | $\frac{3}{4}$ | .60 | .75 |

FENDER MOULDING ENDS

No. 228

Used to finish off the ends of extruded metal moulding. Made of cast brass, highly polished and fit neatly in moulding.

| For Moulding, Inches | Length Overall, Inches | Weight Each, Ounces | Each | |
|----------------------|------------------------|---------------------|-----------------|---------------|
| | | | Polished Bronze | Nickel Silver |
| 1 | $2\frac{1}{2}$ | $1\frac{1}{2}$ | \$0.35 | \$0.40 |
| $1\frac{1}{4}$ | 3 | $2\frac{1}{2}$ | .40 | .45 |

FENDER MOULDING COUPLINGS

No. 229

Made of cast brass; fit inside ends of mouldings and neatly finish the joint.

| For Moulding, Inches | Length, Inches | Each | |
|----------------------|----------------|--------|---------------|
| | | Bronze | Nickel Silver |
| 1 | $2\frac{1}{2}$ | \$0.20 | \$0.25 |
| $1\frac{1}{4}$ | 3 | .30 | .35 |

BUTT HINGES

CAST BRASS

Made of cast brass; emery finish or regular polished brass finish. Fast joint butt hinges with brass pins; holes drilled and cleanly countersunk.

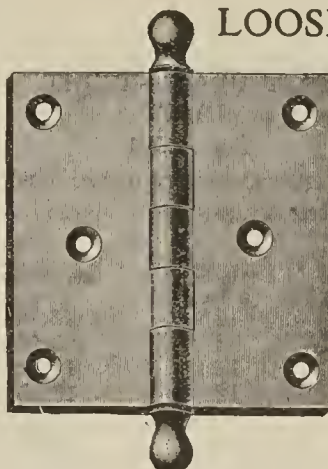
Style 5205

| Size, Inches | Per Dozen Pairs | | Size, Inches | Per Dozen Pairs | |
|---------------------------------|-----------------|--------|---------------------------------|-----------------|---------|
| | Polished | Emery | | Polished | Emery |
| *1 x $\frac{7}{8}$ | | \$3.60 | 3 x 2 | ..... | \$13.44 |
| * $1\frac{1}{4}$ x 1 | | 4.32 | 3 x $2\frac{1}{4}$ | ..... | 15.36 |
| * $1\frac{1}{2}$ x 1 | | 4.56 | 3 x $2\frac{1}{2}$ | ..... | 15.36 |
| $1\frac{1}{2}$ x $1\frac{1}{4}$ | | 4.80 | 3 x 3 | \$22.80 | 16.48 |
| $1\frac{1}{2}$ x $1\frac{1}{2}$ | | 5.04 | $3\frac{1}{2}$ x $2\frac{1}{2}$ | ..... | 20.00 |
| $1\frac{3}{4}$ x $1\frac{1}{4}$ | | 5.04 | $3\frac{1}{2}$ x 3 | 28.20 | 21.60 |
| $1\frac{3}{4}$ x $1\frac{1}{2}$ | | 5.76 | $3\frac{1}{2}$ x $3\frac{1}{2}$ | 33.60 | 24.00 |
| 2 x $1\frac{1}{4}$ | | 6.00 | 4 x 3 | ..... | 28.16 |
| 2 x $1\frac{1}{2}$ | \$10.80 | 6.48 | 4 x $3\frac{1}{2}$ | ..... | 31.44 |
| 2 x $1\frac{3}{4}$ | | 7.44 | 4 x 4 | ..... | 33.60 |
| 2 x 2 | 13.60 | 7.92 | $4\frac{1}{2}$ x 3 | ..... | 31.44 |
| $2\frac{1}{2}$ x $1\frac{1}{2}$ | | 9.36 | $4\frac{1}{2}$ x 4 | ..... | 48.00 |
| $2\frac{1}{2}$ x $1\frac{3}{4}$ | | 10.56 | $4\frac{1}{2}$ x $4\frac{1}{2}$ | ..... | 50.40 |
| $2\frac{1}{2}$ x 2 | | 10.80 | 5 x $3\frac{1}{4}$ | ..... | 54.96 |
| $2\frac{1}{2}$ x $2\frac{1}{2}$ | 18.00 | 12.00 | 5 x 4 | ..... | 60.00 |
| 3 x $1\frac{1}{2}$ | | 13.25 | 5 x 5 | ..... | 64.80 |

This is the standard commercial line. Can be furnished, polished, to order.

*Not regularly carried in stock.

LOOSE PIN BUTTS



CAST BRASS
Style 5215
WITH BALL TIPS

Cast brass; polished natural brass finish; loose pin butts with brass pins. Holes drilled and countersunk for screws as listed below.

| Size Open, Inches | Size Screw, Inches | Per Pair | Size Open, Inches | Size Screw, Inches | Per Pair |
|---------------------------------|--------------------|----------|---------------------------------|--------------------|----------|
| 2 x $1\frac{1}{2}$ | $\frac{3}{4}$ x 6 | \$1.15 | 3 x 3 | 1 x 8 | \$2.30 |
| 2 x 2 | $\frac{3}{4}$ x 7 | 1.40 | $3\frac{1}{2}$ x 3 | 1 x 11 | 3.00 |
| $2\frac{1}{2}$ x 2 | $\frac{7}{8}$ x 7 | 1.65 | $3\frac{1}{2}$ x $3\frac{1}{2}$ | 1 x 11 | 3.30 |
| $2\frac{1}{2}$ x $2\frac{1}{2}$ | $\frac{7}{8}$ x 7 | 1.80 | 4 x 3 | 1 x 11 | 4.50 |
| 3 x 2 | 1 x 8 | 2.00 | 4 x $3\frac{1}{2}$ | 1 x 11 | 5.00 |
| 3 x $2\frac{1}{2}$ | 1 x 8 | 2.20 | 4 x 4 | 1 x 11 | 6.00 |

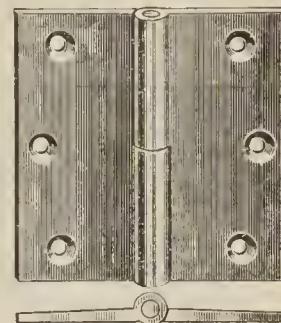
One Pair in Box with Screws

LOOSE JOINT HINGES

CAST BRASS
Style 5207

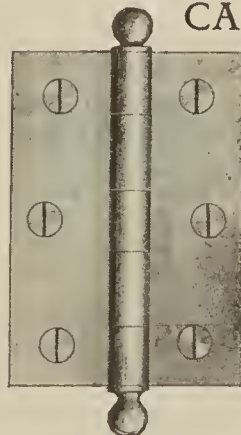
Cast brass; emery finish. Loose joint with solid brass pin. Made left and right hand.

These butts can also be furnished to order in polished finish.



| Size, Inches | For Screw, Per Dozen | | Size, Inches | For Screw, Per Dozen | |
|---------------------------------|----------------------|---------|---------------------------------|----------------------|-------|
| | Nos. | Pairs | | Nos. | Pairs |
| 2 x $1\frac{1}{2}$ | 7 | \$10.92 | 3 x $2\frac{1}{2}$ | 8 | 24.15 |
| 2 x 2 | 7 | 12.50 | 3 x 3 | 8 | 25.20 |
| $2\frac{1}{2}$ x 2 | 7 | 15.12 | $3\frac{1}{2}$ x 3 | 11 | 27.30 |
| $2\frac{1}{2}$ x $2\frac{1}{2}$ | 7 | 17.85 | $3\frac{1}{2}$ x $3\frac{1}{2}$ | 10 | 34.44 |
| 3 x 2 | 8 | 18.90 | 4 x 4 | 11 | 48.72 |

CABINET HINGES



WROUGHT BRASS LOOSE STEEL PINS—BALL TIPS

These butts are made of rolled, wrought brass with loose steel pins having brass ball tips. Furnished in polished finish.

| Nos. | Size Open, Inches | Per Dozen Pairs |
|------|---------------------------------|-----------------|
| | | |
| 54 | $1\frac{1}{4}$ x 1 | \$3.00 |
| 55 | $1\frac{1}{2}$ x $1\frac{1}{4}$ | 3.50 |
| 56 | $1\frac{3}{4}$ x $1\frac{1}{4}$ | 4.00 |
| 57 | 2 x $1\frac{3}{8}$ | 5.20 |
| 58 | 2 x $1\frac{3}{4}$ | 5.70 |
| 59 | $2\frac{1}{2}$ x $1\frac{3}{4}$ | 6.80 |
| 60 | 3 x 2 | 11.00 |

FLAP HINGES
CAST BRASS

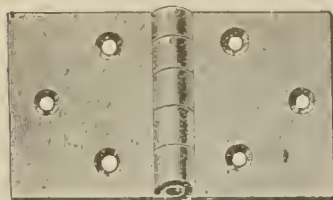
Style 5219
NARROW

Cast brass, polished finish.

| Size Open, Inches | Per Dozen Pairs |
|---------------------------------|-----------------|
| $1\frac{1}{2}$ x $2\frac{5}{8}$ | \$7.50 |
| $1\frac{1}{2}$ x 3 | 7.90 |
| $\frac{3}{4}$ x 3 | 8.25 |

Note—Butts and flaps are always measured along the joint or knuckle first.

FLAP HINGES

CAST BRASS—TIGHT
JOINT

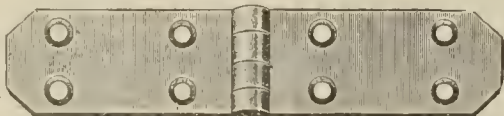
Style 5221

Cast brass emery finish; flush
riveted brass pins.

| Nos. | Size Open, Inches | Pairs in a Box | Per Dozen Pairs |
|------|----------------------|-------------------|--------------------|
| 2486 | 1 x2 | 12 | \$6.84 |
| 2487 | 1 1/4 x2 1/4 | 12 | 8.44 |
| 2488 | 1 1/2 x2 1/2 | 12 | 10.92 |
| 2489 | 1 3/4 x3 | 12 | 13.45 |
| 2490 | 2 x3 | 12 | 19.15 |
| 2491 | 2 x4 | 6 | 21.00 |

WROUGHT BRASS

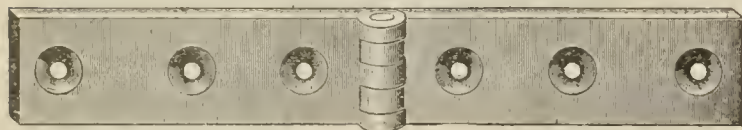
Style 5225

Wrought brass,
polished natural
finish; flush
riveted pins.

| Nos. | Size Open, Inches | Per Dozen Pairs |
|------|----------------------|--------------------|
| 66 | 3 1/2 x 3/4 | \$5.35 |
| 67 | 4 x 3/4 | 6.30 |
| 68 | 6 x 7/8 | 8.30 |

BAGATELLE HINGES

CAST BRASS—HEAVY



Style 5223

Cast brass, polished natural finish; flush riveted brass pins.

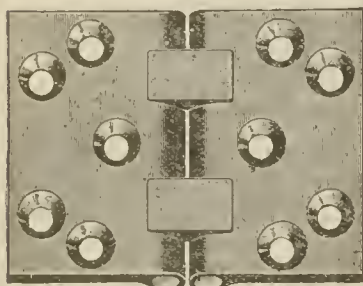
| Nos. | Size Open, Inches | Per Dozen, Pairs |
|------|----------------------|---------------------|
| 2492 | 1 1/2 x4 | \$9.10 |
| 2493 | 5/8 x4 1/2 | 9.90 |
| 2494 | 3/4 x5 | 12.75 |
| 2495 | 7/8 x5 1/2 | 14.50 |
| 2496 | 1 x6 | 16.90 |

Twelve Pairs in a Box

FLUSH COUNTER HINGES

CAST BRASS

Style 5231

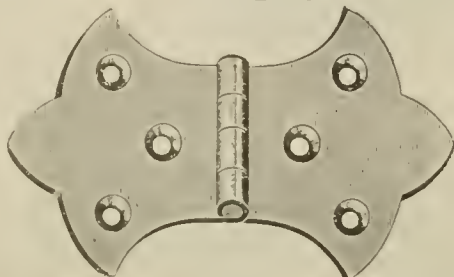
Cast brass, polished natu-
ral finish; flush riveted pins.

| Nos. | Size Open, Inches | Per Pair |
|------|----------------------|----------|
| 1 | 1 1/4 x3 | \$1.40 |
| 2 | 2 x2 1/2 | 1.60 |
| 3 | 3 x4 | 2.80 |

BUTTERFLY HINGES

WROUGHT
BRASS

Style 5227

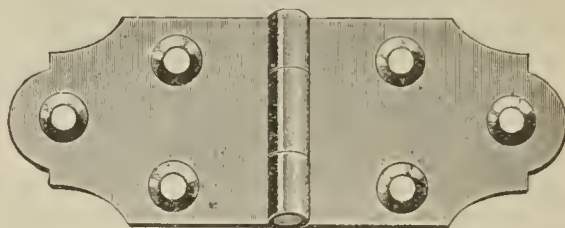
Wrought brass, in
plain finish; flush
riveted brass pins.

| Nos. | Size Open Inches | Pairs in a Box | Per Dozen Pairs |
|------|---------------------|-------------------|--------------------|
| 76 | 2 1/4 | 36 | \$1.20 |
| 75 | 3 | 36 | 1.80 |

Note—Butts and flaps are always measured along the
joint or knuckle first.

WASH TRAY HINGES

CAST BRASS



Style 5229

Cast brass, plain finish; flush riveted pins.

| Nos. | Size Open, Inches | Pairs in a Box | Per Dozen Pairs |
|------|----------------------|-------------------|--------------------|
| 2497 | 1 3/8 x3 | 12 | \$6.50 |
| 2498 | 1 3/8 x4 | 12 | 8.50 |

SUPPORT HINGES

CAST BRONZE

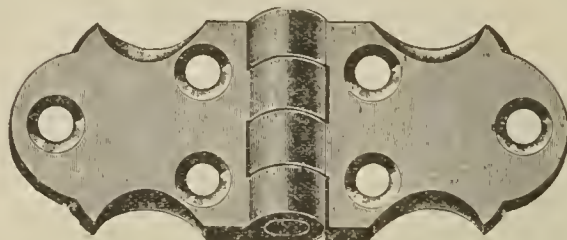
Cast bronze, pol-
ished finish; riveted
cast bronze plates.

| Nos. | Length Overall, Inches | Per Dozen, Pairs |
|------|---------------------------|---------------------|
| 2500 | 8 | \$21.80 |
| 2501 | 10 | 26.35 |
| 2502 | 12 | 29.10 |
| 2503 | 14 | 32.20 |

Twelve Pairs in a Box

CUDDY DOOR HINGES

CAST BRASS



Style 5271

Cast brass; flush riveted brass pins.

| Nos. | Size, Inches | Plain Per Doz. Pairs | Polished Per Dozen Pairs |
|------|-----------------|----------------------------|--------------------------------|
| 1 | 3 | \$6.50 | \$8.50 |
| 2 | 4 | 8.50 | 9.60 |
| 3 | 5 | 10.80 | 13.00 |
| 4 | 6 | .... | 19.00 |

Twelve Pairs in a Box

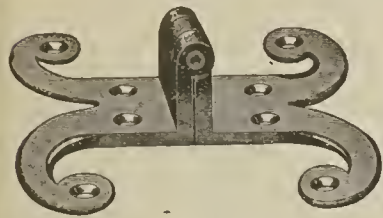
HOOK HINGES

No. 473

Substantially made
of cast manganese
brass. Length mea-
surement is taken
overall.

| Length, Inches | Width Strap Ends, Inches | Weight per Pair, Lbs. | Plain Brass | Polished Brass |
|-------------------|--------------------------------|-----------------------------|----------------|-------------------|
| 4 | 1 1/16 | 3/4 | \$1.50 | \$2.90 |
| 6 | 1 1/4 | 1 3/4 | 2.10 | 3.90 |
| 8 | 1 5/16 | 2 | 2.50 | 4.80 |

RAISED SCROLL HINGES



Style 5259

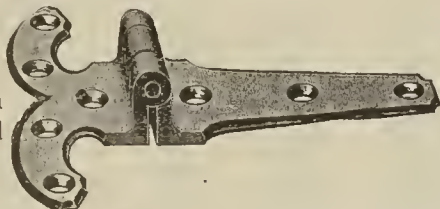
Cast brass, plain and polished finish; flush riveted hinges. Are measured whole length when open.

| No. | Size | Per Pair | |
|----------|--------------------------------|----------|----------|
| | | Plain | Polished |
| No. 2586 | Size 5 Inch; Raised, 1 Inch... | \$1.80 | \$3.60 |

RAISED PORT HINGES

Style 5261

Cast brass in plain and polished natural brass finishes.



| Nos. | Length Over-all, Inches | Length Strap, Inches | Raised, Inches | Per Pair | |
|------|-------------------------|----------------------|----------------|----------|------------|
| | | | | Plain | Pol. Brass |
| 2587 | 6 | 3 3/4 | 3/4 | \$2.05 | \$3.07 |
| 2588 | 8 | 5 1/2 | 1 | 3.85 | 5.76 |
| 2589 | 10 | 7 | 1 | 4.80 | 7.25 |
| 2590 | 12 | 8 1/4 | 1 1/4 | 12.10 | 18.24 |

PORT HINGES



CAST BRASS OR MALLEABLE IRON GALVANIZED

Style 5251

Cast brass, in plain and polished finishes and cast malleable iron, hot galvanized finish. Measure whole length when open.

| Nos. | Length Over-all, Inches | Length Strap, Inches | Per Pair | | |
|----------|-------------------------|----------------------|------------|-------------|------------|
| | | | Galvanized | Plain Brass | Pol. Brass |
| 2546 | 4 | 2 1/4 | \$0.60 | \$0.75 | \$1.10 |
| 2547 | 5 | 3 | .... | .96 | 1.35 |
| 2548 | 6 | 4 | .85 | 1.20 | 1.68 |
| 2549 | 7 | 4 1/2 | .... | 1.55 | 2.10 |
| 2550 | 8 | 5 1/2 | 1.30 | 1.60 | 2.25 |
| 2550 1/2 | 9 | 6 1/4 | .... | 2.00 | 2.70 |
| 2551 | 10 | 7 | 2.00 | 2.45 | 3.25 |
| 2552 | 12 | 8 1/4 | 2.60 | 4.30 | 5.15 |

CAST BRASS
Style 5253

Extra heavy cast brass; plain finish; reinforced at knuckle with one bolt hole in strap.

No. 2555 has lug cast on back, tapped for machine screw, for bolting through the door.



| Nos. | Length Over-all, Inches | Length Strap, Inches | Per Pair | |
|------|-------------------------|----------------------|----------|----------|
| | | | Plain | Polished |
| 2554 | 10 | 7 | \$4.90 | |
| 2555 | 10 | 7 | 10.50 | |

CONTINUOUS HINGES

WROUGHT BRASS—POLISHED



Suitable for hatch covers, etc., carried in stock in lengths of five feet.

| Size Open, Inches | Length, Inches | Each |
|-------------------|----------------|--------|
| 1 1/16 | 60 | \$1.50 |
| 1 1/4 | 60 | 1.65 |
| 1 1/2 | 60 | 1.75 |

STRAP HINGES



Style 5269

Made in cast brass, plain and polished finish and in cast malleable iron, hot galvanized finish. Measure the whole length when open.

| Nos. | Entire Length, Inches | Galvanized | Per Pair | |
|----------|-----------------------|------------|-------------|----------------|
| | | | Plain Brass | Polished Brass |
| 2608 | 4 | \$0.40 | \$0.50 | \$0.80 |
| 2609 | 5 | .... | .70 | 1.05 |
| 2610 | 6 | .60 | .80 | 1.25 |
| 2610 1/2 | 7 | .... | 1.00 | 1.40 |
| 2611 | 8 | .95 | 1.25 | 1.85 |
| 2611 1/2 | 9 | .... | 1.45 | 2.00 |
| 2612 | 10 | 1.20 | 1.65 | 2.40 |
| 2613 | 12 | 1.70 | 2.30 | 3.10 |
| 2614 | 14 | .... | .... | .... |
| 2616 | 16 | .... | .... | .... |

WROUGHT STEEL

LIGHT

Hot Galvanized

Made of wrought steel, hot galvanized with fast brass pins.



| Nos. | Length Each Leaf, Inches | Width at Joint, Inches | For Screws, Nos. | Screw Holes per Pair | Weight per Dozen Pairs, Lbs. | Dozen Pairs in a Barrel | Per Dozen Pairs |
|------|--------------------------|------------------------|------------------|----------------------|------------------------------|-------------------------|-----------------|
| | | | | | | | |
| 2556 | 3 | 1 1/2 | 6 | 12 | 2 1/2 | 225 | \$2.28 |
| 2557 | 4 | 1 1/4 | 7 | 12 | 4 | 150 | 3.24 |
| 2558 | 5 | 1 1/4 | 8 | 16 | 6 | 100 | 4.08 |
| 2559 | 6 | 1 3/8 | 9 | 16 | 9 | 80 | 5.76 |
| 2560 | 8 | 1 7/8 | 10 | 16 | 15 | 48 | 8.40 |
| 2561 | 10 | 2 1/8 | 10 | 16 | 22 | 32 | 13.08 |
| 2562 | 12 | 2 3/4 | 12 | 16 | 38 | 16 | 21.24 |

HEAVY

Made of wrought steel, hot galvanized; with fast brass pins.



| Nos. | Length Each Leaf, Inches | Width at Joint, Inches | For Screws, Nos. | Screw Holes per Pair | Weight per Dozen Pairs, Lbs. | Dozen Pairs in a Barrel | Per Dozen Pairs |
|------|--------------------------|------------------------|------------------|----------------------|------------------------------|-------------------------|-----------------|
| | | | | | | | |
| 2563 | 4 | 1 1/8 | 9 | 12 | 6 | 100 | \$4.80 |
| 2564 | 5 | 1 3/4 | 10 | 16 | 9 1/2 | 70 | 6.96 |
| 2565 | 6 | 2 1/8 | 11 | 16 | 19 | 38 | 10.80 |
| 2566 | 8 | 3 1/4 | 12 | 16 | 32 3/4 | 20 | 17.52 |
| 2567 | 10 | 3 3/4 | 14 | 16 | 52 | 12 1/2 | 27.84 |
| 2568 | 12 | 4 1/4 | 16 | 20 | 82 | 8 1/2 | 40.56 |
| 2569 | 14 | 4 3/4 | 16 | 20 | 86 | 6 | 49.20 |

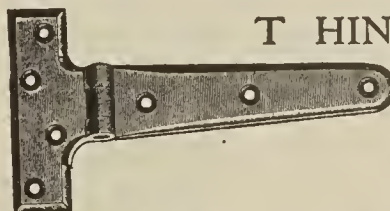
All Above Wired in Bundles of Twelve and Packed in Barrels

T HINGES

CAST BRASS

Style 5247

Cast brass, polished and plain brass finishes; heavy brass riveted pin.



| Nos. | Entire Length, Inches | Length Strap, Inches | Per Pair | |
|------|-----------------------|----------------------|----------|----------|
| | | | Plain | Polished |
| 2541 | 5 | 3 | \$1.45 | \$1.95 |
| 2542 | 6 | 4 1/2 | 1.50 | 2.10 |
| 2543 | 7 | 5 | 1.60 | 2.30 |
| 2544 | 8 | 6 | 1.75 | 2.60 |
| 2545 | 10 | 8 | .... | .... |

LIGHT STEEL

Hot Galvanized

Wrought steel, hot galvanized; with fast brass pins.



| Length Strap, Inches | Width at Joint, Inches | For Screws, Nos. | Holes per Pair | Weight per Dozen Pairs, Lbs. | Dozen Pairs in Barrel | Per Dozen Pairs |
|----------------------|------------------------|------------------|----------------|------------------------------|-----------------------|-----------------|
| | | | | | | |
| 3 | 1 | 7 | 12 | 2 3/4 | 200 | \$3.00 |
| 4 | 1 1/16 | 7 | 12 | 3 1/2 | 130 | 3.60 |
| 5 | 1 1/16 | 8 | 14 | 4 3/4 | 100 | 4.44 |
| 6 | 1 1/4 | 8 | 14 | 6 1/4 | 80 | 5.40 |

T HINGES

HEAVY
Hot Galvanized

Made of wrought steel, hot galvanized finish; with fast brass pins; screw holes countersunk.

| Nos. | Length Strap, Inches | Width of Strap at Joint, Ins. | For Screws, Nos. | Screw Holes per Pair | Weight per Dozen Pairs, Lbs. | Dozen Pairs in a Barrel | Per Dozen Pairs |
|------|----------------------------|-------------------------------------|------------------------|----------------------------|------------------------------------|-------------------------------|-----------------------|
| 2574 | 8 | 1 1/8 | 10 | 14 | 11 3/4 | 40 | \$11.28 |
| 2575 | 10 | 1 1/8 | 11 | 16 | 19 1/4 | 25 | 16.80 |
| 2576 | 12 | 2 1/4 | 12 | 18 | 31 | 15 | 27.12 |
| 2577 | 14 | 2 1/8 | 13 | 22 | 44 | 10 | 39.24 |

EXTRA HEAVY

Hot Galvanized

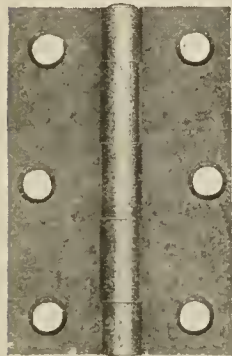
Made of wrought steel hot galvanized finish; with fast brass pin; screw holes countersunk.



| Nos. | Length Strap, Inches | Width of Strap at Joint, Ins. | For Screws, Nos. | Screw Holes per Pair | Weight per Dozen Pairs, Lbs. | Dozen Pairs in a Barrel | Per Dozen Pairs |
|------|----------------------------|-------------------------------------|------------------------|----------------------------|------------------------------------|-------------------------------|-----------------------|
| 2578 | 4 | 1 5/8 | 9 | 12 | 7 3/4 | 65 | \$7.80 |
| 2579 | 5 | 2 1/8 | 10 | 16 | 13 1/2 | 37 | 11.44 |
| 2580 | 6 | 2 3/8 | 11 | 16 | 21 | 25 | 16.20 |
| 2581 | 8 | 2 7/8 | 12 | 18 | 37 | 15 | 25.80 |
| 2582 | 10 | 3 3/4 | 14 | 18 | 55 | 9 | 36.72 |
| 2583 | 12 | 4 1/8 | 16 | 20 | 74 | 6 1/2 | 53.64 |
| 2584 | 14 | 4 1/8 | 16 | 20 | 79 | 5 1/2 | 62.52 |
| 2585 | 16 | 4 1/8 | 16 | 22 | 88 1/2 | 5 | 74.40 |

All Above, Wired in Bundle of Twelve and Packed in Barrels

WROUGHT STEEL BUTTS

FAST JOINT
GALVANIZED—BRASS PINS

Furnished in narrow and broad. Wrought steel, hot galvanized finish; 2 1/2 inch and larger have five knuckles; smaller sizes have three. The ends of the pins are spun, thus making a fast joint.

The first dimension always indicates the length of the joint.

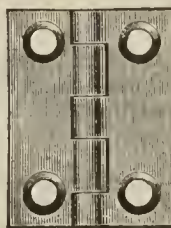
Narrow

| Nos. | Length, Inches | Width Open, Inches | Screw Holes in Each Butt | Pairs in a Box | Pairs in a Case | Weight per Case, Lbs. | Per Dozen Pairs |
|------|-------------------|--------------------------|-----------------------------------|----------------------|-----------------------|-----------------------------|-----------------------|
| 2504 | 1 1/2 | 1 1/8 | 4 | 12 | 1200 | 108 | \$3.48 |
| 2505 | 2 | 1 1/8 | 4 | 12 | 600 | 102 | 3.72 |
| 2506 | 2 1/2 | 1 7/8 | 6 | 12 | 600 | 136 | 5.28 |
| 2507 | 3 | 2 1/8 | 6 | 12 | 300 | 107 | 6.48 |
| 2508 | 3 1/2 | 2 1/2 | 6 | 6 | 300 | 160 | 8.76 |
| 2509 | 4 | 2 7/8 | 8 | 6 | 180 | 148 | 12.24 |

Broad

| Nos. | Length, Inches | Width Open, Inches | Screw Holes in Each Butt | Pairs in a Box | Pairs in a Case | Weight per Case, Lbs. | Per Dozen Pairs |
|------|-------------------|--------------------------|-----------------------------------|----------------------|-----------------------|-----------------------------|-----------------------|
| 2511 | 2 | 2 | 4 | 6 | 300 | 92 | \$5.04 |
| 2512 | 2 1/2 | 2 1/2 | 6 | 6 | 300 | 151 | 5.88 |
| 2513 | 3 | 3 | 6 | 6 | 180 | 133 | 7.08 |
| 2514 | 3 1/2 | 3 1/2 | 6 | 6 | 180 | 131 | 9.72 |
| 2515 | 4 | 4 | 8 | 6 | 120 | 176 | 13.08 |
| 2516 | 5 | 5 | 8 | 3 | 60 | 170 | 24.24 |
| 2517 | 6 | 6 | 8 | 1 | 36 | 140 | 50.16 |

WROUGHT BRASS BUTTS



STEEL PIN

Wrought brass butts with steel pins; countersunk for screws as listed. Size 1 1/2 inch and smaller have four screw holes in each butt; larger sizes have six screw holes. Illustration shows style of narrow and broad butts. Dipped finish.

Narrow

| Length, Inches | Width Open, Inches | For Screws, Nos. | Quantity in a Box, Dozen Pair | Weight per Box, Lbs. | Per Dozen Pairs |
|-------------------|--------------------------|------------------------|-------------------------------------|----------------------------|-----------------------|
| 1/2 | 1/2 | 0 | 6 | 1/2 | \$0.24 |
| 3/4 | 1/2 | 1 | 6 | 1 1/8 | .28 |
| 7/8 | 1/2 | 2 | 6 | 1 3/8 | .30 |
| 1 | 3/4 | 2 | 6 | 1 3/4 | .32 |
| 1 1/8 | 3/4 | 3 | 6 | ... | .40 |
| 1 1/4 | 3/4 | 3 | 6 | 2 1/2 | .46 |
| 1 3/8 | 3/4 | 3 | 6 | ... | .50 |
| 1 1/2 | 3/4 | 4 | 6 | 3 3/8 | .52 |
| 1 5/8 | 3/4 | 4 | 6 | ... | .60 |
| 1 3/4 | 1 | 4 | 6 | 4 5/8 | .68 |
| 1 7/8 | 1 1/8 | 5 | 6 | ... | .76 |
| 2 | 1 1/8 | 5 | 6 | 5 3/4 | .80 |
| 2 1/4 | 1 1/8 | 6 | 3 | 4 | 1.12 |
| 2 1/2 | 1 1/8 | 6 | 3 | 6 | 1.40 |
| 2 3/4 | 1 1/8 | 7 | 3 | ... | 2.00 |
| 3 | 1 3/8 | 7 | 3 | 8 3/8 | 2.50 |

Middle

| Length, Inches | Width Open, Inches | For Screws, Nos. | Quantity in a Box, Dozen Pair | Weight per Box, Lbs. | Per Dozen Pairs |
|-------------------|--------------------------|------------------------|-------------------------------------|----------------------------|-----------------------|
| 1/2 | 5/8 | 1 | 6 | 5/8 | \$0.26 |
| 3/4 | 5/8 | 2 | 6 | 1 1/4 | .30 |
| 7/8 | 1 1/8 | 2 | 6 | 1 1/2 | .34 |
| 1 | 1 1/8 | 2 | 6 | 1 7/8 | .38 |
| 1 1/8 | 1 1/8 | 3 | 6 | ... | .44 |
| 1 1/4 | 1 1/8 | 3 | 6 | 2 3/4 | .48 |
| 1 3/8 | 1 1/8 | 4 | 6 | 2 3/4 | .56 |
| 1 1/2 | 1 1/8 | 4 | 6 | 3 3/4 | .60 |
| 1 5/8 | 1 1/8 | 4 | 6 | ... | .68 |
| 1 3/4 | 1 1/8 | 4 | 6 | 5 | .76 |
| 1 7/8 | 1 1/8 | 5 | 6 | ... | .84 |
| 2 | 1 1/8 | 5 | 6 | 6 1/2 | .92 |
| 2 1/4 | 1 1/8 | 6 | 3 | 4 1/4 | 1.30 |
| 2 1/2 | 1 1/8 | 6 | 3 | 6 | 1.70 |
| 2 3/4 | 1 1/8 | 8 | 3 | ... | 2.30 |
| 3 | 1 1/8 | 8 | 3 | 9 | 3.00 |

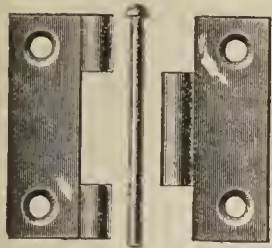
Broad

| Length, Inches | Width Open, Inches | For Screws, Nos. | Quantity in a Box, Dozen Pair | Weight per Box, Lbs. | Per Dozen Pairs |
|-------------------|--------------------------|------------------------|-------------------------------------|----------------------------|-----------------------|
| 1/2 | 1/2 | 0 | 6 | 5/8 | \$0.28 |
| 3/4 | 1/2 | 1 | 6 | 1 3/8 | .32 |
| 7/8 | 1/2 | 2 | 6 | 1 7/8 | .36 |
| 1 | 3/4 | 2 | 6 | 2 1/4 | .40 |
| 1 1/8 | 3/4 | 3 | 6 | ... | .48 |
| 1 1/4 | 3/4 | 3 | 6 | 3 1/8 | .54 |
| 1 3/8 | 3/4 | 3 | 6 | ... | .60 |
| 1 1/2 | 3/4 | 4 | 6 | 4 3/8 | .68 |
| 1 5/8 | 3/4 | 4 | 6 | ... | .76 |
| 1 3/4 | 1 | 4 | 6 | 5 3/4 | .84 |
| 1 7/8 | 1 1/8 | 5 | 6 | ... | .96 |
| 2 | 1 1/8 | 5 | 6 | 7 1/2 | 1.04 |
| 2 1/4 | 1 1/8 | 6 | 3 | 4 5/8 | 1.50 |
| 2 1/2 | 1 1/8 | 6 | 3 | 6 3/4 | 2.00 |
| 2 3/4 | 1 1/8 | 7 | 3 | ... | 2.60 |
| 3 | 1 1/8 | 7 | 3 | 10 1/2 | 3.50 |

Note—If butts are desired with brass pins, add 10 per cent to above prices.

"Locks and Latches for Doors and Hatches"

WROUGHT STEEL BUTTS

LOOSE PIN—REVERSIBLE
GALVANIZED—BRASS PINS

These butts may be reversed by removing the oval head loose pin. With galvanized screws.

| Nos. | Size, Inches | Screw Holes in Each Butt | Pairs in a Case | Weight per Case, Lbs. | Per Dozen, Pairs |
|------|--------------|--------------------------|-----------------|-----------------------|------------------|
| 2518 | 2 x2 | 4 | 300 | 102 | \$4.94 |
| 2519 | 2½x2½ | 6 | 300 | 161 | 6.16 |
| 2520 | 3 x3 | 6 | 240 | 184 | 7.69 |
| 2521 | 3½x3½ | 6 | 180 | 202 | 10.66 |
| 2522 | 4 x4 | 8 | 144 | 214 | 14.00 |
| 2533 | 5 x5 | 10 | 72 | 223 | 25.63 |
| 2524 | 6 x6 | 10 | 36 | 175 | 53.32 |

FLAP HINGES

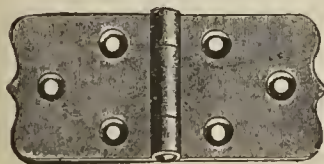
GALVANIZED

Wrought steel, hot galvanized; tight joint; brass pins.



| Nos. | Length Joint, Inches | Width Open, Inches | Screw Holes per Flap | Pairs in a Box | Wgt. per Dozen Pair, Lbs. | Pairs in a Case | Weight per Case, Lbs. | Per Dozen, Pairs |
|------|----------------------|--------------------|----------------------|----------------|---------------------------|-----------------|-----------------------|------------------|
| 2532 | ¾ | 2¾ | 4 | 12 | 1½ | 50 | 122 | \$2.16 |
| 2534 | 1 | 2⅞ | 6 | 12 | 2 | 50 | 160 | 2.52 |
| 2535 | 1¼ | 3⅞ | 6 | 12 | 2½ | 50 | 122 | 3.00 |
| 2536 | 1½ | 3⅞ | 6 | 12 | 3¼ | 25 | 142 | 4.20 |
| 2537 | 1¾ | 4 | 6 | 6 | 5 | 25 | 96 | 4.68 |
| 2538 | 2 | 4⅞ | 6 | 6 | 6⅞ | 25 | 122 | 5.64 |

WASH TRAY HINGES



GALVANIZED

Tight joint, brass pin, wrought steel, hot galvanized hinges.

| Nos. | Size, Inches | Pairs in a Box | Pairs in a Case | Weight per Pair, Lbs. | Weight per Case, Lbs. | Per Dozen Pairs |
|------|--------------|----------------|-----------------|-----------------------|-----------------------|-----------------|
| 1 | 1½x2¾ | 12 | 50 | 2½ | 132 | \$4.80 |
| 2 | 1¾x3⅞ | 12 | 50 | 3⅞ | 160 | 5.64 |
| 3 | 2 x4⅞ | 12 | 25 | 6 | 152 | 7.20 |

All Above, Packed with Screws

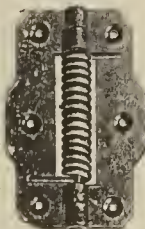
SHOW CASE SPRING HINGES

SINGLE ACTING

Style 5313

Wrought brass plates, spring and pin. Plain finish.

| Nos. | Size, Inches | Weight per Dozen Pair, Lbs. | Per Dozen, Pair |
|------|--------------|-----------------------------|-----------------|
| 3 | 3 | 2 | \$10.35 |
| 5 | 5 | 4½ | 18.30 |

DOUBLE ACTING
Style 5315

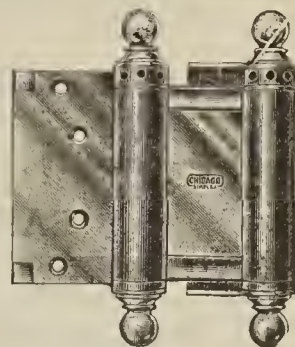
Wrought brass with spiral coil brass springs. Plain finish.

| Nos. | Size, Inches | Weight per Dozen, Pair, Lbs. | Per Dozen, Pairs |
|------|--------------|------------------------------|------------------|
| 9 | 3 | 4 | \$19.20 |
| 11 | 5 | 7¼ | 38.10 |



SPRING HINGES

SIMPLEX—BRASS OR BRONZE METAL



Single Acting

Double Acting

No hanging strip required giving a far more solid support fastened to the door jamb than if a hanging strip were used. Has frictionless bearings, brass against steel, which gives an easy swinging action.

The coil springs are made of high grade tempered steel spring wire. Has reinforced center web which is made in one piece, the ends joining on a diagonal line across the center web.

Ball tips are screwed and locked on with a concealed locking ring that may be easily released.

Made of wrought brass or bronze, polished natural finish; furnished in single and double acting.

Single Acting—Style 5317

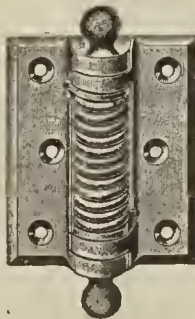
| Nos. | Length Flange, Inches | For Doors, Thickness, Inches | Per Pair |
|------|-----------------------|------------------------------|----------|
| 2618 | 3 | ¾ to 1 | \$7.30 |
| 2619 | 4 | ⅞ to 1¼ | 8.90 |
| 2620 | 5 | 1⅞ to 1½ | 10.80 |
| 2621 | 6 | 1¼ to 1¾ | 13.70 |
| 2622 | 7 | 1⅞ to 1⅞ | 17.40 |
| 2623 | 8 | 1½ to 2 | 23.40 |
| 2624 | 10 | 1¼ to 2¼ | 31.70 |

Double Acting—Style 5319

| Nos. | Length Flange, Inches | For Doors, Thickness, Inches | Per Pair |
|------|-----------------------|------------------------------|----------|
| 2625 | 3 | ¾ to 1 | \$13.20 |
| 2626 | 4 | ⅞ to 1¼ | 15.00 |
| 2627 | 5 | 1⅞ to 1½ | 18.40 |
| 2628 | 6 | 1¼ to 1¾ | 22.80 |
| 2629 | 7 | 1⅞ to 1⅞ | 29.00 |
| 2630 | 8 | 1½ to 2 | 39.00 |
| 2631 | 10 | 1¼ to 2¼ | 52.80 |

One pair in a box with screws of same metal, tension adjuster and instructions for applying.

SCREEN DOOR SPRING HINGES



Style 5311

Cast brass plate and ball tip pin. Brass spiral coil spring. Take No. 10 screws.

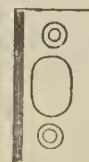
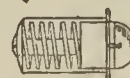
| No. | Size, Inches | Finish | Per Pair |
|------|--------------|----------------|----------|
| 2617 | 3x2½ | Polished Brass | \$4.00 |

FRICTION CATCHES

WROUGHT BRASS

Style 5783

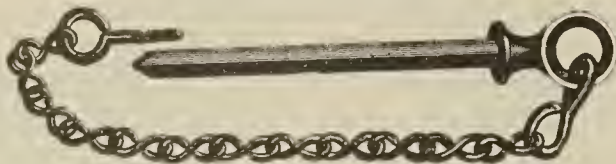
With brass shell and striker. Extension of bolt can be adjusted with a screw driver. Oblong striker furnished as illustrated.



Per Dozen

No. 2955—Size Shell, ⅜ x ¾ Inch\$1.20

SASH PINS



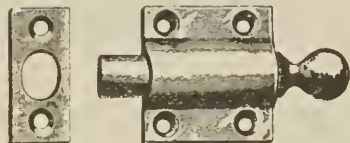
Style 5991

Cast brass; plain brass finish. Two plates furnished with each pin.

No. 4569—Length Pin, $2\frac{1}{2}$ Inches.....\$4.15

Per Dozen

SASH BOLTS



CAST BRASS

Cast brass in polished bronze and dull or polished brass finishes; with holdback spring bolt.

No. 5748—Size, $1\frac{1}{8}$ x $1\frac{1}{4}$ Inches\$0.60

Each

STUBS AND PLATES

Style 5595

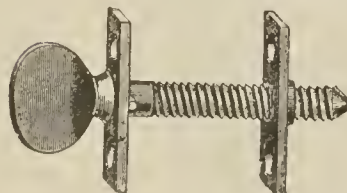
Cast bronze; emery finish. For use with storm shutters. Size overall $\frac{3}{4}$ x $1\frac{1}{8}$ inches.

No. 2880\$12.40

Per Dozen Pairs



PAPER FILE OR MIRROR SCREWS



Style 5993

Cast brass; polished finish.

Per Dozen

No. 2—Distance Between Plates, $1\frac{1}{2}$ Inches. \$6.20

SHUTTER BARS

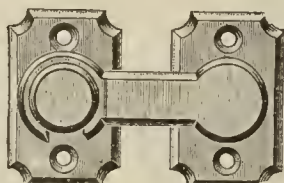
CAST BRASS

Cast brass; polished finish.

Length,
Inches
 $2\frac{1}{2}$
3

Weight per
Dozen, Lbs.
 $\frac{1}{4}$
 $\frac{3}{8}$

Per
Dozen
\$12.00
15.00

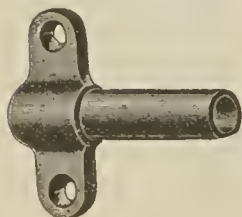


WINDOW GUARD ENDS

SINGLE

Style 5655

For holding window guard rods; made of solid cast brass; polished finish.



| Nos | Size Plate, Inches | For Rod, Inch | Per Pair |
|-----|--------------------------------|---------------------|----------|
| 0 | $\frac{1}{8}$ x $1\frac{1}{2}$ | $\frac{1}{2}$ | \$1.15 |
| 1 | $\frac{1}{2}$ x 2 | $\frac{1}{2}$ Heavy | 1.75 |

TRIPLE

Style 5657

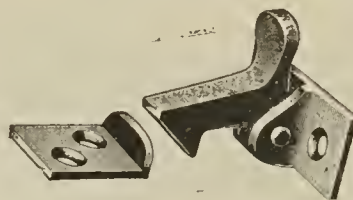
Long pattern for holding three window guard rods; made of solid cast brass; polished finish.

| Nos. | Size Plate, Inches | For Rods, Inch | Per Pair |
|------|--------------------|---------------------|----------|
| 2 | $\frac{1}{2}$ x 9 | $\frac{1}{2}$ | \$3.45 |
| 3 | $\frac{3}{4}$ x 9 | $\frac{1}{2}$ Heavy | 4.50 |



ELBOW CATCHES

Style 5785



Cast brass; polished finish. Catch lever has a small spiral brass spring. For light cupboard doors, etc.

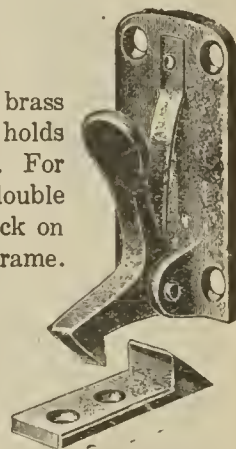
Per Dozen

No. 296—Size Base, $1\frac{1}{8}$ x $\frac{5}{8}$ Inches; Weight per Dozen, 1 Lb.....\$4.15

UPRIGHT PATTERN

Style 5789

Cast brass; highly polished, natural brass finish. Flat spring riveted to base plate holds lever catch in locked position at all times. For closet, cupboard, locker doors of the double door type, etc. Also used as window lock on windows opening out from bottom of frame.



Per Dozen

No. 297—Size Base, $2\frac{1}{8}$ x 1 Inches\$9.30

SHELF RESTS

Style 5781

Made of solid wrought bronze.

Per Dozen



No. 2954—Diameter Pin, $\frac{3}{8}$ Inch; Projection, $\frac{3}{4}$ Inch.....\$4.15

HAND RAIL BRACKETS

Style 5519

For fastening hand rail; made of solid bronze; emery finish. Three holes in bracket and two in bottom clamp for countersunk wood screws.

Per Dozen

No. 2811—Projects, $2\frac{3}{4}$ Inches\$19.80



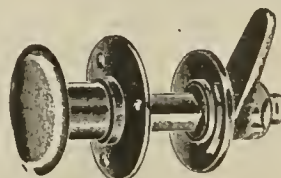
CUPBOARD TURNBUCKLES

Style 5775

Lever catch turns with knob; for doors $\frac{7}{8}$ to $1\frac{1}{4}$ inches thick; made of cast brass; polished finish.

Per Dozen

No. 1\$26.85



CASEMENT FASTS

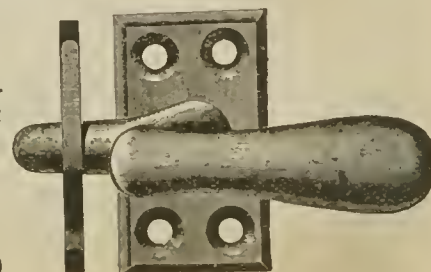
CAST BRASS

Style 5629

Cast brass; reversible; with rim strike; polished brass finish.

Per Dozen

No. 2—Size, $1\frac{1}{2}$ x 2 Inches; Weight per Dozen, $3\frac{3}{8}$ Lbs. \$14.00



RAIL POSTS

Style 5525

Has a round base drilled for countersunk head wood screws.

Made of cast brass; polished finish. Illustration shows end post.

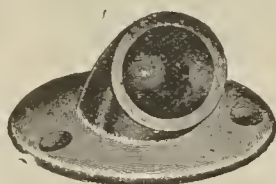


| Nos. | Diam. Base, Inches | Size Rail, Inches | Height to Center of Rail, Inches | Each |
|------|--------------------|-------------------|----------------------------------|--------|
| 2814 | 1 3/4 | 1 | 2 1/2 | \$2.00 |

Note—In ordering specify if end or center posts are desired.

PLAIN
Style 5533

For supporting pipe rail at the ends; has a round, flange base with holes for countersunk wood screws, made of galvanized iron or polished brass.



| Size, Nos. | Bored for Rail, Inch | Diameter Base, Inches | Each |
|------------|----------------------|-----------------------|-------------------------------------|
| 01 | 1/2 | 1 5/8 | Galv. Iron \$0.20 Pol. Brass \$0.45 |
| 02 | 5/8 | 1 5/8 | .25 .60 |
| 03 | 3/4 | 2 5/8 | .50 1.20 |

Note—Can also be furnished bored for pipe rails as follows: No. 01 for 1/4-inch pipe; No. 02 for 3/8-inch pipe; No. 03 for 1/2-inch pipe.

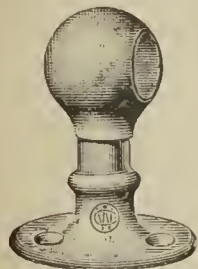
FOR RAIL
Style 5531

Made of solid cast brass; polished finish; round flange base has holes for wood screws.

| Nos. | Diameter Rail, Inch | Each | Nos. | Diameter Rail, Inch | Each |
|------|---------------------|--------|------|---------------------|--------|
| 2827 | 1/2 | \$0.45 | 2830 | 7/8 | \$0.70 |
| 2828 | 5/8 | .50 | 2831 | 1 | .80 |
| 2829 | 3/4 | .60 | .... | ... | .... |

STANCHION POSTS

GALVANIZED CAST IRON AND POLISHED BRASS



End, Fig. 545

Fig. 545—End

Fig. 5450—Center

Fig. 546—Bow

Fig. 5460—Corner



Bow, Fig. 546

| Size, Nos. | Extreme Height of Post, Inches | Bored For | —Figs. 545-5450— Galv., Each | Brass, Each | —Figs. 545-5460— Galv., Each | Brass, Each |
|------------|--------------------------------|-----------|---------------------------------|-------------|---------------------------------|-------------|
| 1 | 2 | 5/8 Rod | \$0.25 | \$0.70 | \$0.40 | \$1.00 |
| 1 1/2 | 2 | 1/4 Pipe | .25 | .70 | .40 | 1.00 |
| 2 | 2 1/2 | 5/8 Rod | .35 | .90 | .50 | 1.10 |
| 2 1/2 | 2 1/2 | 1/4 Pipe | .35 | .90 | .50 | 1.10 |
| 3 | 3 | 5/8 Rod | .50 | 1.25 | .65 | 1.40 |
| 3 1/2 | 3 | 3/8 Pipe | .50 | 1.25 | .65 | 1.40 |
| 5 | 4 | 3/4 Rod | .80 | 2.60 | 1.00 | 2.80 |
| 5 1/2 | 4 | 1/2 Pipe | .80 | 2.60 | 1.00 | 2.80 |

Drilled for Wood Screws No. 1 and 1 1/2—No. 10 Screws. Other sizes for No. 12 Screws.

RAIL ENDS

GALVANIZED CAST IRON AND POLISHED BRASS

With Plate and one Stanchion Post.

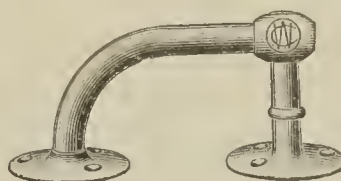


Fig. 547

| Size, Nos. | To go with Stanchion Post, Inches | Diam. of Rail, Inches | Weight Each (Iron), Lbs. | Galv., Each | Polished Brass, Each |
|------------|-----------------------------------|-----------------------|--------------------------|-------------|----------------------|
| 1 | 2 | 5/8 Rod | 1/2 | \$0.65 | \$1.50 |
| 2 | 2 1/2 | 5/8 Rod | 7/8 | 1.05 | 2.00 |
| 3 | 3 | 5/8 Rod | 1 1/8 | 1.30 | 2.50 |
| 5 | 4 | 3/4 Rod | 2 1/8 | 1.95 | 3.50 |

Bored for pipe rail to order, viz: Nos. 1, 2, 3 for 1/4-in. pipe; No. 3 for 3/8-in. pipe; No. 5 for 1/2-in. pipe.

GRAB RAIL

Style 5521

Extra heavy pattern; made of cast brass; polished finish. Has holes in base for countersunk screws.



| Nos. | Diameter Base, Inches | For Rail Size, Inches | Height to Center of Rail, Inches | Each |
|----------|-----------------------|-----------------------|----------------------------------|--------|
| 2002 | 2 1/2 | 1 1/4 | 2 1/4 | \$4.00 |
| 2002 1/2 | 2 3/4 | 1 1/2 | 2 1/2 | 5.00 |

OVAL BASE

Style 5523

Has an oval base with two holes for countersunk head wood screws. Made of solid cast brass; polished finish.

Each

No. 2812—Size Base, 3 3/4 x 2 1/2; For 1 1/2 Inch Rail; Height to center of Rail, 2 1/8 Inches..\$5.00



HAND RAIL STANCHIONS

CABIN TOP FOR WOOD HAND RAIL

For use with wood hand rails on cabin tops. Double base permits the proper fitting on crowned decks. Cast bronze, polished. Made for two sizes of rail.



No. 144

| Diameter of Hole, Inches | Weight Each, Lbs. | Each |
|--------------------------|-------------------|--------|
| 1 | 1 | \$0.65 |
| 1 1/4 | 1 1/4 | 1.00 |

RAIL FASTENINGS

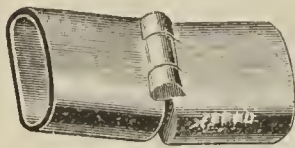


Fig. 122

RAIL HINGE

Made to fit standard hand rail on high class yachts and cruisers. Polished cast bronze.

| Nos | Size Rail, Inches | Length, Inches | Weight, Lbs. | Each |
|-----|-------------------|----------------|--------------|--------|
| 1 | 1½ x 2½ | 5 | 17⁄8 | \$3.50 |
| 2 | 1⅜ x 3 | 3⅝ | 1¾ | 3.50 |

RAIL LOCK
FLUSH

Cast bronze polished finish. Has strong spring catch to hold rail end in position.

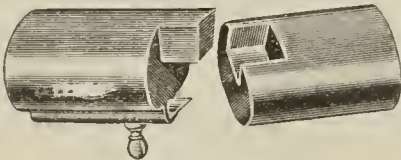


Fig. 123

| Nos | Size Rail, Inches | Length, Inches | Weight, Lbs. | Per Set |
|-----|-------------------|----------------|--------------|---------|
| 1 | 1½ x 2½ | 5 | 17⁄8 | \$3.50 |
| 2 | 1⅜ x 3 | 3⅝ | 1¾ | 3.50 |

CHAIR TURNBUCKLES



Style 5853

Used for fastening dining saloon chairs to the floor when the movable type is used.

Top plate is fastened to bottom of chair and bottom plate to the floor; easily adjusted or detached.

Made entirely of brass; polished finish.

No. 2995—Length Open, 13½ Inches; Length of Adjustment, 2¼ Inches\$....

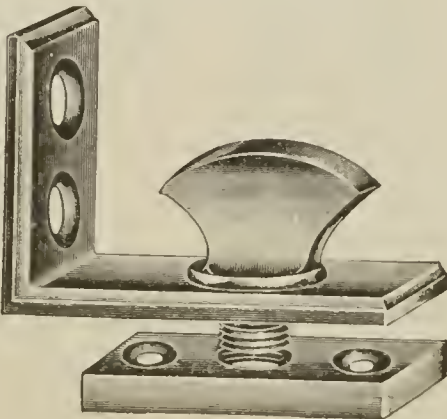
Not regularly carried in stock; furnished to order only.

Price on Application

TABLE LEG FASTENERS

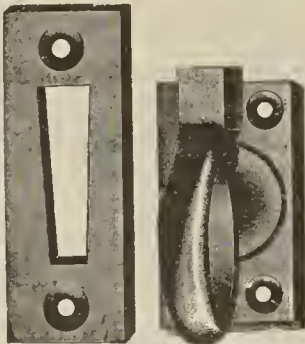
Used for fastening tables to the floor; side plate is attached to leg of table and bottom plate to the floor; held together by a thumb screw; quickly attached and detached.

Made of solid cast brass; polished finish.



Size, 1½x1⅞x⅞ Inches.....\$1.75

CASEMENT FASTENERS



CAST BRASS
Style 5627

Cast brass; reversible; with mortise strike; polished brass finish.

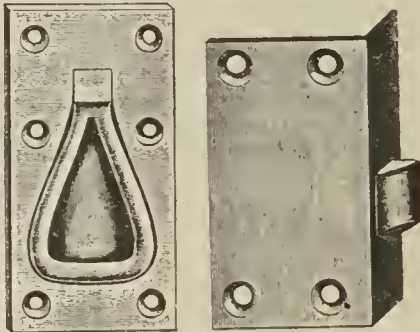
Per Dozen

No. 1—Size, 1¼x1 Ins.; Weight per Dozen, 4¾ Lbs.\$8.00

CUPBOARD LATCHES

FLUSH DROP
HANDLE
Style 5777

The catch is operated by raising the flush handle, which then connects with the half mortise latch; all parts of solid cast brass; polished finish.

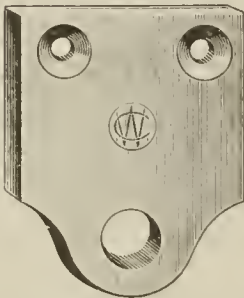


Each

No. 2952—Size Latch Plate, 1⅝x2⅞ Inches; Size Handle Plate, 1¼x3¼ Inches.....\$....

Price on Application

BERTH HANGER PLATES



Used with Pullman type berths. Fastens to deck or ceiling beams or carlins. Top of plate is cut at a three degree angle to meet the sweep of the deck or cabin top. Size of plate, 2½x1⅞x¼ inch. Hole diameter, 7⁄8 inch.

Each

No. BEP—Wgt. Ea., 5 Ozs...\$0.65

BERTH HOOKS

Used with leather or webbing strap for hanging berths of the Pullman type. Shape and opening of hook makes it most suitable for use with berth hanger eye plates and with eye bolts. Made of polished cast brass, 3 inches overall and with 1¼x¼ inch slot.

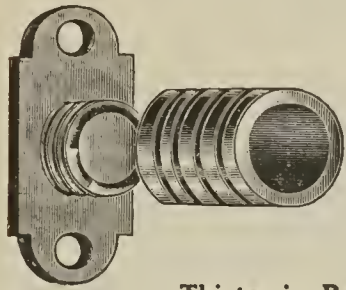
Each

No. BH—Wgt. Ea., 5 Ozs.\$0.65



TIEBOUT Service means the rallying of all our force to the ultimate use of our customers. This organization consists of men and women of high calibre, compatible in every way with the class of service our customers have a right to demand—to be served promptly, fairly and efficiently.

PORT CURTAIN ROD BRACKETS

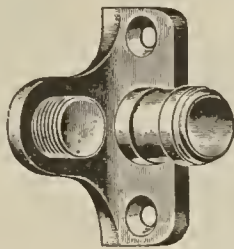


Fits flat against the sash; two holes in base for countersunk wood screws; made of heavy cast brass; polished finish.

| No. 305 | | |
|----------------|----------------------|-----------------|
| Rod Size, Inch | Weight Per Box, Lbs. | Per Gross Pairs |
| $\frac{3}{8}$ | $4\frac{1}{2}$ | \$33.00 |
| $\frac{1}{2}$ | $5\frac{1}{2}$ | 55.00 |

Thirty-six Pairs in a Box

Bracket type; fits against the wall, window or sash and projects out; two holes in base for countersunk wood screws; made of cast brass; polished finish.

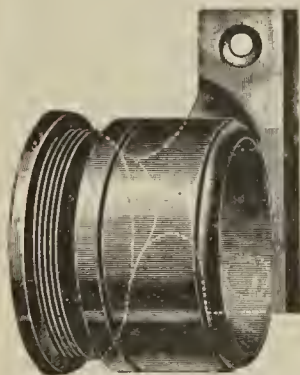


No. 289

| Rod Size, Inch | Weight per Box, Lbs. | Per Pair | Rod Size, Inch | Weight per Box, Lbs. | Per Pair |
|----------------|----------------------|----------|----------------|----------------------|----------|
| $\frac{3}{8}$ | 6 | \$0.80 | $\frac{1}{2}$ | $7\frac{1}{4}$ | \$0.80 |

Thirty-six Pairs in a Box

BERTH BRACKETS



Made of cast brass; two holes in base for countersunk wood screws; polished finish.

| No. 336 | | | |
|-------------------|--------------------|----------------------|----------|
| Pole Size, Inches | Projection, Inches | Weight per Box, Lbs. | Per Pair |
| $\frac{3}{4}$ | 1 | 3 | \$1.30 |
| 1 | $1\frac{1}{4}$ | $4\frac{3}{4}$ | 1.40 |
| 1 | 2 | $5\frac{3}{4}$ | 1.80 |
| $1\frac{1}{2}$ | $1\frac{3}{8}$ | $4\frac{3}{4}$ | 2.20 |

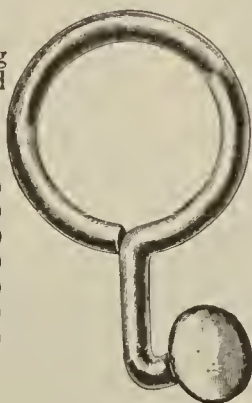
$\frac{3}{4}$ and 1 Inch Sizes, Twelve Pairs in a Box; $1\frac{1}{2}$ Inch Size, Six Pairs in a Box

BERTH RINGS

Made particularly for hanging berth curtains; solid brass; polished button.

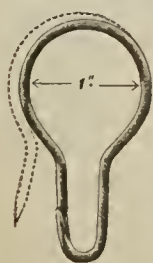
| No. 82 | | |
|------------------|----------------------|-----------|
| Diameter, Inches | Weight per Box, Lbs. | Per Dozen |
| $\frac{1}{2}$ | $3\frac{1}{2}$ | \$1.50 |
| $\frac{3}{4}$ | $4\frac{3}{4}$ | 1.70 |
| 1 | $6\frac{3}{4}$ | 1.80 |
| $1\frac{1}{4}$ | 8 | 2.00 |
| $1\frac{1}{2}$ | $9\frac{3}{4}$ | 2.50 |
| $1\frac{3}{4}$ | ... | 2.50 |

144 in a Box



SHOWER BATH CURTAIN LOOPS

Hard brass wire; nickel plated and highly polished. Made in two sizes that cover every requirement.



| No. 365 | | |
|----------------|---------------------|---------|
| Size, Inches | Weight per 100 Lbs. | Per 100 |
| 1 | $\frac{1}{2}$ | \$1.70 |
| $1\frac{3}{8}$ | $1\frac{1}{2}$ | 1.90 |

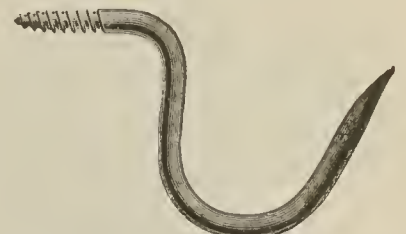
Note—Size refers to diameter of bar loops are used with. Illustration shows 1 inch size.

"Locks and Latches for Doors and Hatches"

MEAT HOOKS

TO SCREW

Tinned steel wire; with wood screw thread.



| Nos. | Height, Inches | Wire, Inches | Weight per Hundred, Lbs. | Per Gross |
|------|----------------|----------------|--------------------------|-----------|
| 1 | $1\frac{1}{8}$ | $\frac{1}{8}$ | .. | \$ 6.00 |
| 2 | $2\frac{1}{8}$ | $\frac{1}{4}$ | .. | 8.00 |
| 3 | $2\frac{5}{8}$ | $\frac{5}{16}$ | .. | 14.00 |
| 4 | $2\frac{7}{8}$ | $\frac{3}{8}$ | .. | 24.00 |
| 5 | $3\frac{1}{4}$ | $\frac{7}{8}$ | .. | 34.00 |

BAR
Tinned, wrought steel.

| For Bars, Ins. | Square Steel, Inches | Weight per Hundred, Lbs. | Per Gross |
|----------------|----------------------|--------------------------|-----------|
| 1 | $\frac{5}{8}$ | .. | \$28.00 |
| $2\frac{1}{8}$ | $\frac{5}{8}$ | .. | 32.00 |
| 2 | $\frac{3}{8}$ | .. | 48.00 |
| 2 | $\frac{1}{2}$ | .. | 76.00 |
| $2\frac{1}{4}$ | $\frac{1}{2}$ | .. | 79.00 |

DAUNTLESS SKYLIGHT RAISER

POLISHED CAST BRASS

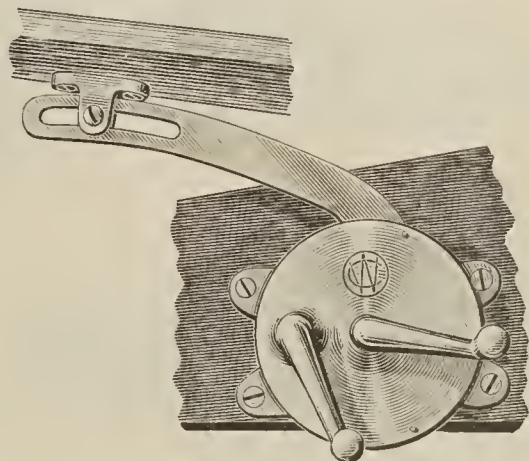


Fig. 4820

So designed that opening even heavy Skylights is easy. A turn of the Handle gives full open or shut—a turn of the Locking Lever, and the Skylight is securely held in any desired position. Can be used in pairs and operated by one person by simply loosening the Locking Lever.

Nothing to jam or stick—no Thumb Screws or Lock Nuts to fuss with. Made for both right and left hand installations.

| Size of Base, Inches | Length Arms, Inches | Stroke of Arm, Inches | Weight, Pounds | Each |
|-------------------------|---------------------|-----------------------|----------------|---------|
| $4\frac{3}{4} \times 6$ | $10\frac{1}{2}$ | 6 | $3\frac{1}{4}$ | \$10.00 |

Motor Boat Requirements

Numbers on Bow—Three inches in height is the minimum—must be distinct—clearly visible and readable at a distance of at least 100 feet. This applies to all motor boats, whether or not machinery is in working order.

Equipment—Must be on board when underway.

Life Preservers—Must be of a type approved by the U. S. Local Inspectors, and be in good condition.

Fire Extinguisher—Must be of a type approved by the U. S. Local Inspectors (see Department Circular No. 236).

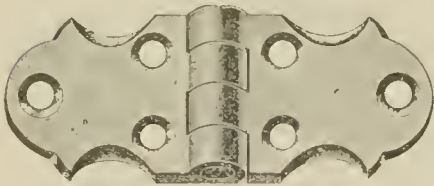
Lights—Must be lit immediately after sundown.

Award of Number Sheet—Should be on board at all times when underway.

ICE HOUSE FLAP HINGES

POLISHED CAST BRASS
Style 5271

Cast brass, with flush riveted pins; holes countersunk for flat head screws or bolts.

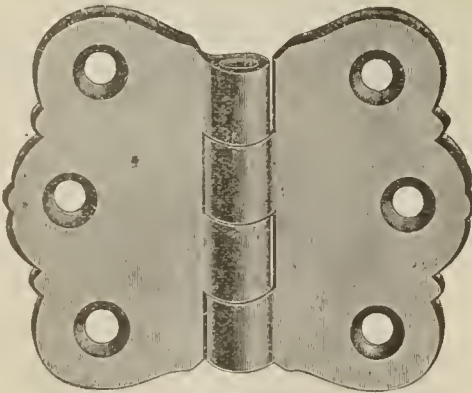


| Nos. | Size, Inches | Per Doz., Pair |
|------|--------------|----------------|
| 1 | 3 | \$8.50 |
| 2 | 4 | 9.60 |
| 3 | 5 | 13.00 |
| 4 | 6 | 19.00 |

REFRIGERATOR HINGES

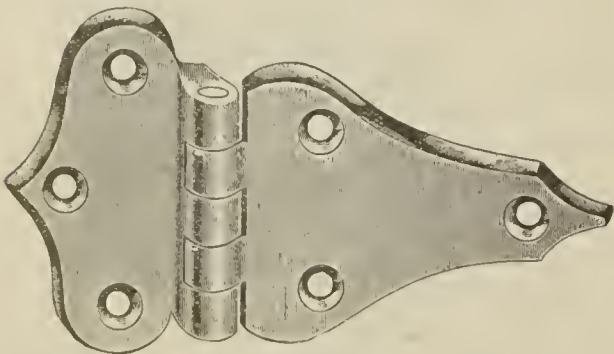
CAST BRASS
Style 5277
FLUSH

Cast brass polished finish. Holes drilled and countersunk.



| Nos. | Size, Inches | Per Dozen Pairs |
|------|---------------------------|-----------------|
| 6 | 2 x 2 1/4 | \$9.60 |
| 7 | 2 3/4 x 3 1/4 | 14.40 |
| 8 | Extra Heavy 2 3/4 x 3 1/4 | 17.50 |

Note: Extra heavy to order only.



OFFSET
Style 5301

Cast brass, polished natural finish; with offset. Holes drilled and countersunk.

No. 51—Size 2 1/2 x 4 Inches; Offset, 7/8 Inch\$15.06

EXTENSION TYPE



FLUSH
Style 5303

Cast brass, polished natural finish. Can be used either right or left hand; is tight joint with flush riveted pins. Holes countersunk for flat head screws.

No. 402—Size 3 1/2 x 5 1/4 Inches; Offset, 7/8 Inch....\$22.70

ICE HOUSE AND REFRIGERATOR HINGES

FLUSH
Style 5275

Cast brass; fitted with brass pins. Polished finish; tight pin, flush riveted.



| Nos. | Length Overall, Inches | Length Strap, Inches | Weight per Dozen Pairs, Lbs. | Per Dozen Pairs |
|--------|------------------------|----------------------|------------------------------|-----------------|
| 030 | 4 1/2 | 2 5/8 | 3 | \$8.50 |
| 30 | 5 | 3 | 3 3/4 | 9.50 |
| 31 | 5 3/4 | 3 1/2 | 6 3/4 | 11.60 |
| 32 | 6 1/4 | 4 | 8 | 16.00 |
| 33 | 7 1/2 | 5 | 12 | 20.00 |
| 34 | 8 1/2 | 6 | 15 | 25.50 |
| 34 1/2 | 10 | 7 | 18 | 33.00 |
| 35 | 11 1/4 | 8 | 25 3/8 | 42.00 |
| 36 | 13 | 9 | 36 | 83.80 |
| 37 | 14 | 10 | .... | 89.40 |
| 38 | 16 1/2 | 12 | .... | 148.40 |
| 39 | 18 | 14 | .... | 206.40 |
| 40 | 21 | 16 | .... | 264.20 |
| 41 | 25 1/2 | 20 | .... | 323.20 |



OFFSET
Style 5307

Cast brass; with offset; can be used either right or left hand; fitted with brass pins, flush riveted; polished brass finish.

| Nos. | Length Overall, Inches | Length Strap, Inches | Offset, Inch | Weight per Dozen Pairs, Lbs. | Per Dozen Pairs |
|------|------------------------|----------------------|--------------|------------------------------|-----------------|
| 300 | 5 | 3 | 3/8 | 5 1/4 | \$13.20 |
| 301 | 5 3/4 | 3 1/2 | 3/8 | 6 3/4 | 16.80 |
| 302 | 6 1/4 | 4 | 3/8 | 9 3/4 | 21.60 |
| 303 | 7 1/2 | 5 | 3/8 | 12 | 30.00 |
| 304 | 8 1/2 | 6 | 1/2 | 14 1/4 | 33.00 |
| 305 | 11 1/2 | 7 | 1/2 | 16 1/2 | 50.00 |

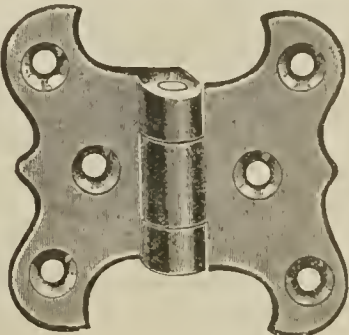
Note—Other size offsets can be furnished to order.

REFRIGERATOR HINGES

OFFSET

Style 5291

Cast brass, polished finish; with offset. Can be used either right or left hand. Holes countersunk.

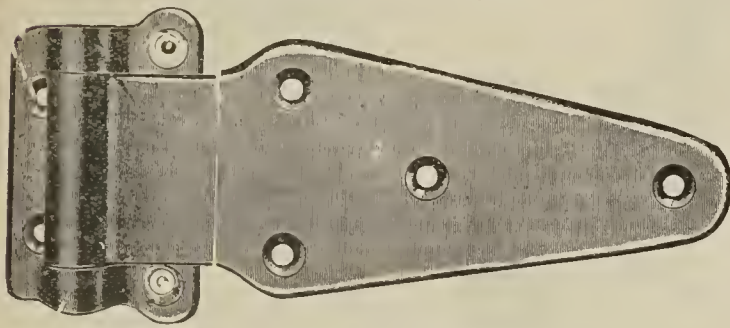


| Nos. | Size, Inches | Offset, Inch | Per Dozen Pairs |
|------|---------------|--------------|-----------------|
| 407 | 2 1/4 x 2 3/8 | 1/16 | \$10.32 |
| 408 | 3 x 3 1/2 | 1/16 | 16.50 |

Note—Other size offsets can be furnished to order.

This catalog consists chiefly of the principal items in demand by the refrigerator trade. We manufacture, however, a great many special designs for special work and solicit inquiries covering any type of refrigerator hardware required for special purposes.

OVERLAP HINGES FOR REFRIGERATORS

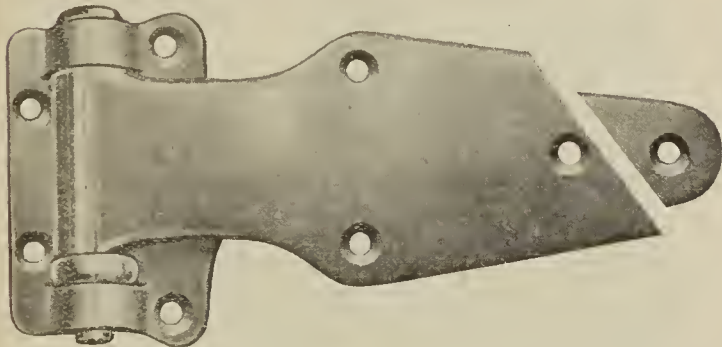


Style 5309

Cast brass; heavy pattern; polished finish.

| Nos. | Length Overall, Inches | Per Pair $\frac{13}{16}$ and $1\frac{1}{8}$ Inch Offsets |
|------|------------------------------|--|
| 0 | $5\frac{3}{4}$ | \$2.40 |
| 1 | $7\frac{1}{2}$ | 4.20 |
| 2 | $9\frac{3}{4}$ | 5.30 |
| 3 | $13\frac{1}{2}$ | 8.00 |
| 4 | $16\frac{1}{4}$ | 10.85 |

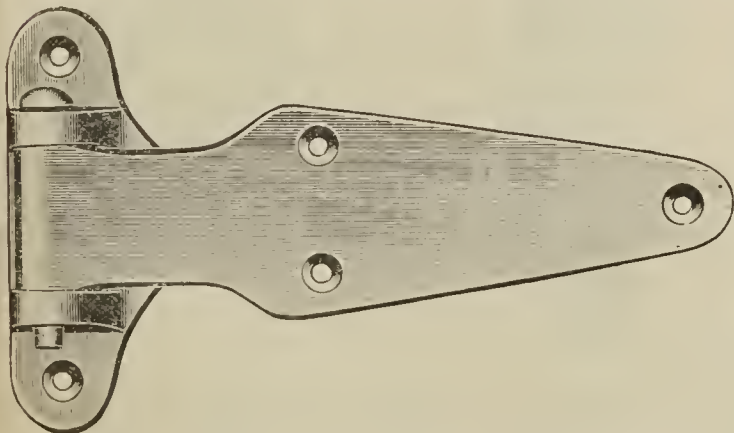
Other size offsets can be furnished to order.



Ball bearing; cast brass, polished finish; equipped with highest grade ball bearing washers and loose steel pin. Screws not furnished.

| Nos. | Length Strap, Inches | Length Overall, Inches | Offsets, Inches | Takes Screw Nos. | Per Pair $\frac{13}{16}$ Inch Offset |
|------|----------------------------|------------------------------|--|------------------------|--|
| 494B | 7 | $7\frac{1}{2}$ | $\frac{1}{2}, \frac{9}{16}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}, \frac{15}{16}, 1, 1\frac{1}{8}$ | 12 | \$4.40 |
| 495B | 9 | $9\frac{3}{4}$ | $\frac{5}{8}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}, \frac{15}{16}, 1, 1\frac{1}{8}$ | 12 | 5.60 |
| 496B | $12\frac{1}{2}$ | $13\frac{1}{2}$ | $\frac{3}{4}, \frac{13}{16}, \frac{7}{8}, 1, 1\frac{1}{8}, 1\frac{1}{4}$ | 14 | 8.40 |
| 497B | 15 | $16\frac{1}{4}$ | $\frac{3}{4}, 1, 1\frac{1}{8}, 1\frac{1}{4}$ | 14 | 11.50 |

Note—Not regularly carried in stock—other offsets special.



Polished, cast brass; for use with narrow stiles on wood and metal electric refrigerators. Loose pin.

| Nos. | Length Strap, Inches | Length Overall, Inches | Offsets, Inch | For Screw No. | Per Pair, $\frac{13}{16}$ Inch Offset |
|------|----------------------------|------------------------------|--|---------------------|---|
| 492B | $5\frac{3}{4}$ | 6 | $\frac{3}{8}, \frac{7}{16}, \frac{1}{2}, \frac{5}{8}, \frac{11}{16}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}, 1, 1\frac{1}{8}$ | 10 | \$2.50 |
| 318C | $4\frac{3}{4}$ | $5\frac{3}{4}$ | $\frac{9}{16}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}$ | 9 | 1.70 |

Note—Not regularly carried in stock.

OVERLAP HINGES FOR REFRIGERATORS

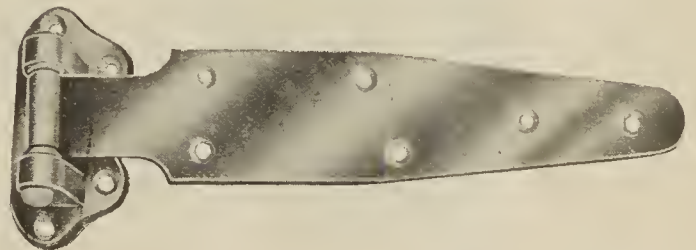


Cast brass; polished finish; five knuckle joint with steel pin used on narrow stiles and for fairly large doors.

| No. | Length Strap, Inches | Length Overall, Inches | Offsets, Inches | Per Pair |
|------|-------------------------|---------------------------|---|-------------|
| 545B | $5\frac{1}{2}$ | $6\frac{1}{2}$ | $\frac{5}{8}, \frac{3}{4}, \frac{7}{8}, 1, 1\frac{1}{8}$ | \$1.75 |
| 572B | $4\frac{3}{4}$ | $5\frac{3}{8}$ | Flush $\frac{3}{8}, \frac{7}{16}, \frac{5}{8}, \frac{3}{4}$ | 1.25 |
| 598B | $3\frac{1}{2}$ | $4\frac{1}{2}$ | Flush $\frac{3}{8}, \frac{7}{16}, \frac{5}{8}, \frac{3}{4}$ | 1.10 |

Note—Not regularly carried in stock.

GALVANIZED OVERLAPS



The above hinges have a steel strap and are adaptable for cold storage doors. Equipped with loose pin, steel washers, galvanized finish.

| Nos. | Length Overall, Inches | Base, Inches | Offset | Per Pair |
|-------|---------------------------|--------------------|----------------|-------------|
| 445B | $17\frac{1}{2}$ | 3 x $6\frac{1}{2}$ | $1\frac{1}{8}$ | \$10.00 |
| *531S | $12\frac{1}{2}$ | 3 x $3\frac{3}{8}$ | * | 6.00 |

*Furnished in following offsets, Flush, $\frac{3}{4}$, $1\frac{1}{8}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$.

Note—Not regularly carried in stock.

INSIDE LEVER HANDLES FOR REFRIGERATOR HANDLES



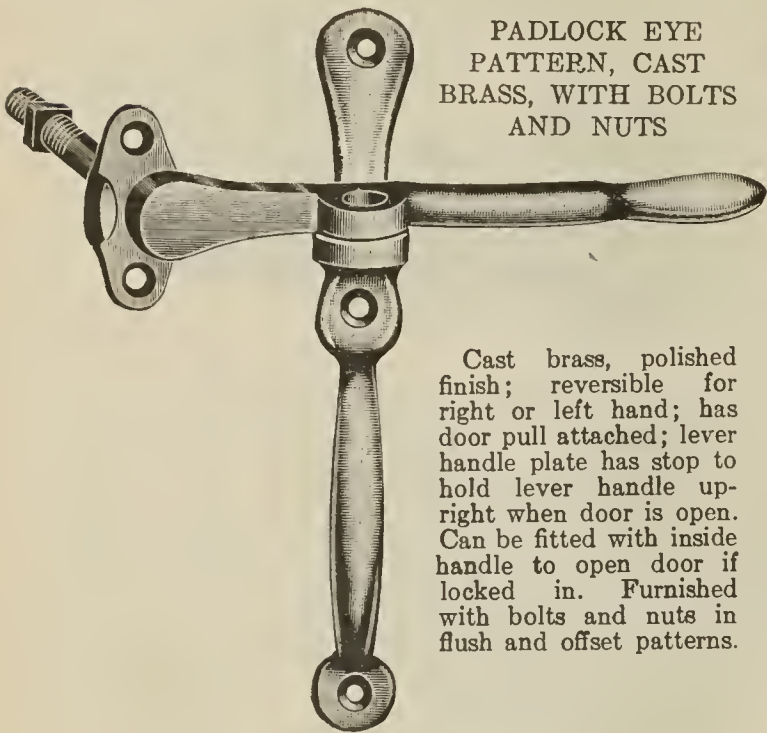
CAST IRON

Style 5475

Cast iron refrigerator lever inside handles for use on inside of lever bolt. Used as a precaution to prevent being locked inside refrigerators.

| Nos. | Length, Inches | For Levers Nos. | Per Dozen |
|------|-------------------|--------------------|--------------|
| 1 | 9 | 1, 101, 1010 | \$13.25 |
| 2 | 6 | 2, 102, 1020 | 6.50 |

REFRIGERATOR LEVERS

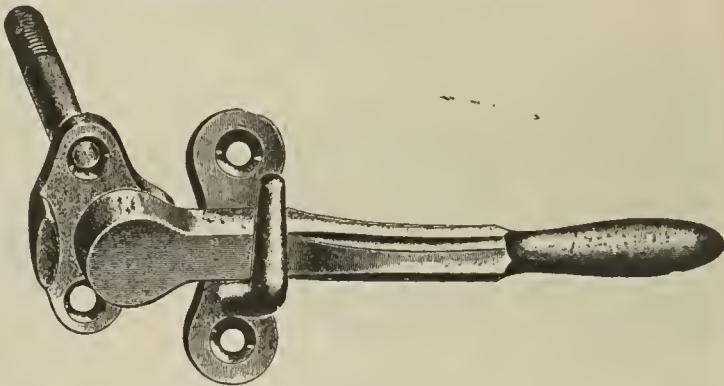


PADLOCK EYE
PATTERN, CAST
BRASS, WITH BOLTS
AND NUTS

Cast brass, polished finish; reversible for right or left hand; has door pull attached; lever handle plate has stop to hold lever handle upright when door is open. Can be fitted with inside handle to open door if locked in. Furnished with bolts and nuts in flush and offset patterns.

| Nos. | Length Lever, Inches | Flush | $1\frac{3}{16}$ - $1\frac{1}{8}$ Offset |
|------|-------------------------|---------|--|
| 113 | 12 | \$93.00 | \$97.80 |
| 112 | 9 | 49.20 | 55.00 |
| 111 | $6\frac{1}{2}$ | 31.20 | 32.76 |

REFRIGERATOR LEVERS



CONDIT—CAST BRASS AND GALVANIZED IRON

Cast iron, hot galvanized and cast brass, polished finish. Lever handle plate has stop to keep lever in upright position when door is open. Reversible for right or left hand; can be fitted with inside handles. Furnished with bolts and nuts in galvanized and brass.

| Nos. | Length Lever, Inches | Length Bolt, Inches | Per Dozen | | |
|------|----------------------------|---------------------------|----------------------|-------------------------|----------------------------------|
| | | | Galvanized, Flush | Polished Brass Flush | $1\frac{3}{16}$ - $1\frac{1}{8}$ |
| 1 | 12 | $8\frac{1}{2}$ | \$24.00 | \$57.60 | \$60.48 |
| 2 | 9 | $7\frac{1}{2}$ | 20.16 | 30.00 | 31.56 |
| 3 | $6\frac{1}{2}$ | 7 | 12.24 | 19.00 | 20.04 |
| 4 | $5\frac{1}{2}$ | 5 | ..... | 12.60 | 13.20 |
| 5 | $4\frac{1}{2}$ | 5 | ..... | 9.60 | ..... |
| 6 | $4\frac{1}{2}$ | No Bolt | ..... | ..... | ..... |

Note—Offset levers furnished $\frac{1}{8}$ inch unless otherwise ordered. Other size offsets can be furnished to order.

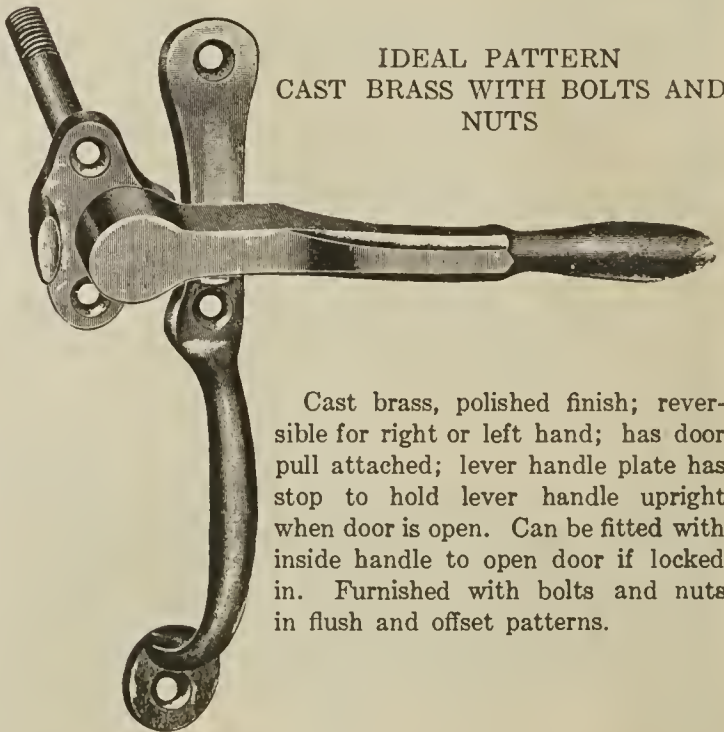


SELF CLOSING
CAST BRASS

Cast brass, polished finish; furnished in either right or left hand; illustration shows left hand. Lever has a cam which engages the lip of the pull; so that when the door is closed or slammed, the lever automatically throws over, locking, and as well, wedging the door tightly. Lever plate has stop holding lever handle upright when door is open. Has door pull attached. Furnished with $\frac{1}{8}$ inch offset lever.

| Nos | Size Lever, Inches | Per Dozen |
|------|-----------------------|--------------|
| 2792 | $5\frac{1}{2}$ | \$21.60 |
| 2793 | $6\frac{1}{2}$ | 30.00 |
| 2794 | 8 | 75.00 |

IDEAL PATTERN
CAST BRASS WITH BOLTS AND
NUTS

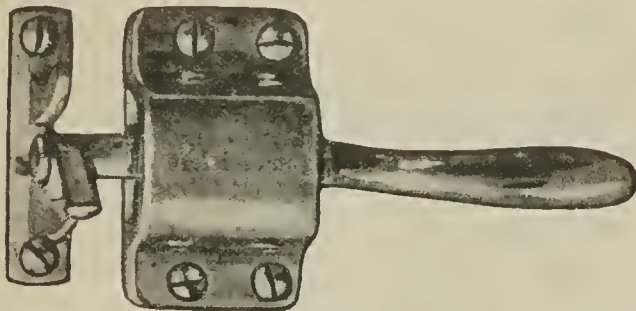


Cast brass, polished finish; reversible for right or left hand; has door pull attached; lever handle plate has stop to hold lever handle upright when door is open. Can be fitted with inside handle to open door if locked in. Furnished with bolts and nuts in flush and offset patterns.

| Nos. | Length Lever, Inches | Length Bolt, Inches | Per Dozen | |
|------|-------------------------|------------------------|-----------|----------------------------------|
| | | | Flush | $1\frac{3}{16}$ - $1\frac{1}{8}$ |
| 101 | 12 | $8\frac{1}{2}$ | \$57.60 | \$60.48 |
| 102 | 9 | $7\frac{1}{2}$ | 30.00 | 31.56 |
| 103 | $6\frac{1}{2}$ | 7 | 19.00 | 20.04 |
| 104 | $5\frac{1}{2}$ | 5 | 12.60 | 13.20 |
| 105 | $4\frac{1}{2}$ | 5 | 9.60 | ..... |

Note—Offset levers furnished $\frac{1}{8}$ inch unless otherwise ordered. Other size offsets can be furnished to order.

REFRIGERATOR FASTENERS

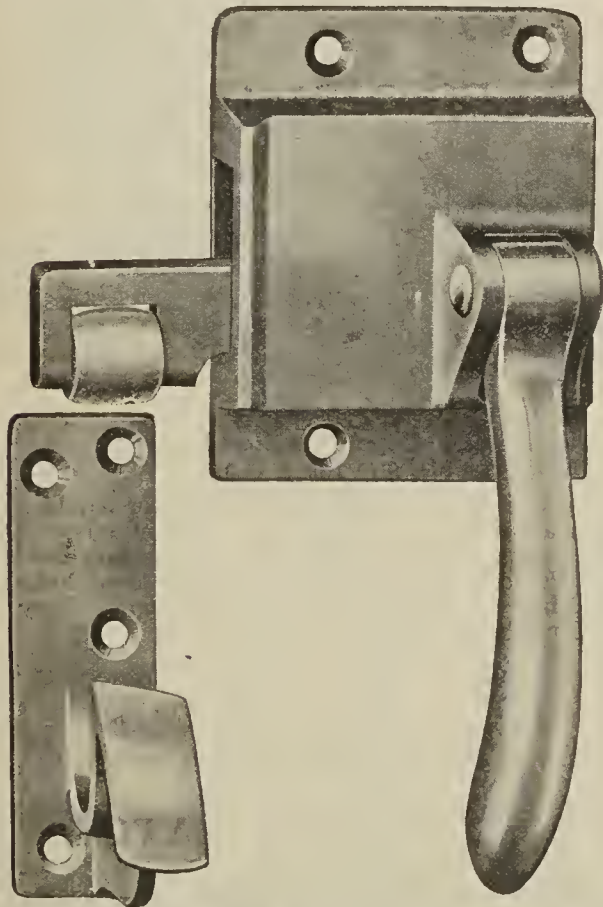


Polished cast brass furnished in either right or left hand; in ordering specify hand desired. Can be furnished flush or offset $\frac{1}{8}$ inch. Offset is furnished unless otherwise ordered. Illustration shows left hand. Wedge bolt; narrow strike or keeper.

| Nos. | Length Lever, Inches | Size Case, Inches | Offset, Inches | Per Dozen |
|------|-------------------------|------------------------------------|--|--------------|
| 64B | 3 | $1\frac{5}{8} \times 2\frac{5}{8}$ | Flush, $\frac{3}{8}, \frac{7}{16}, \frac{1}{2}, \frac{9}{16}, \frac{3}{4}$ | \$10.80 |
| *22B | $2\frac{7}{8}$ | $1\frac{3}{4} \times 2\frac{3}{4}$ | $\frac{3}{8}, \frac{1}{2}, \frac{5}{8}, \frac{11}{16}, \frac{3}{4}$ | 18.00 |
| *21B | $3\frac{1}{2}$ | $1\frac{7}{8} \times 3$ | $\frac{7}{16}, \frac{9}{8}, \frac{3}{4}, \frac{7}{8}$ | 22.80 |

*These items are furnished with roller bolts.
 $\frac{1}{8}$ offset carried in stock.

SERVICE DOOR FASTENERS



Spring action; polished cast brass.

No. 269A is specially designed for hotel work or where heavy service is required. Illustration shows left hand, offset fastener.

No. 269A is regularly furnished in $\frac{5}{8}, \frac{13}{16}, \frac{3}{4}, \frac{7}{8}, 1$ and $1\frac{1}{8}$ inch offsets

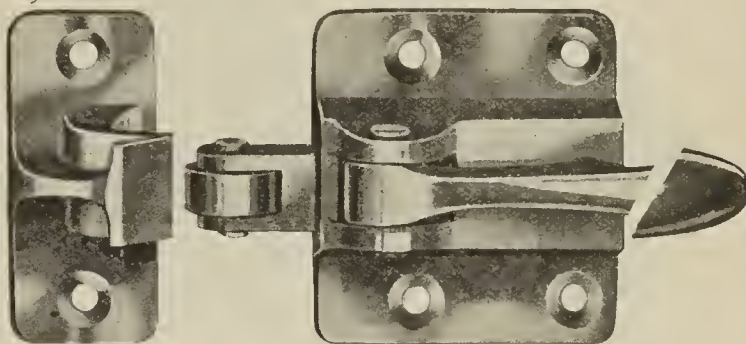
No. 255A in $\frac{1}{8}, \frac{3}{16}, \frac{3}{8}, \frac{7}{16}, \frac{1}{2}, \frac{9}{16}, \frac{5}{8}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}, \frac{15}{16}, 1$, $1\frac{1}{8}$ and $1\frac{3}{8}$ inch offsets

No. 254A in flush, $\frac{1}{8}, \frac{3}{16}, \frac{3}{8}, \frac{7}{16}, \frac{1}{2}, \frac{5}{8}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}$ and $1\frac{1}{8}$ inch offsets

| Nos. | Handle Length, Inches | Size Case, Inches | Keeper Width, Inches | Per Dozen |
|------|-----------------------------|------------------------------------|----------------------------|--------------|
| 269A | $5\frac{3}{4}$ | $3\frac{3}{8} \times 4\frac{1}{4}$ | $1\frac{1}{4}$ | \$75.60 |
| 255A | $5\frac{1}{2}$ | $2\frac{3}{4} \times 3\frac{1}{2}$ | $1\frac{1}{4}$ | 46.20 |
| 254A | 4 | $2 \times 2\frac{3}{4}$ | 1 | 23.40 |

$\frac{1}{8}$ carried in stock. 269A and 255A can be furnished to take a padlock.

REFRIGERATOR FASTENERS

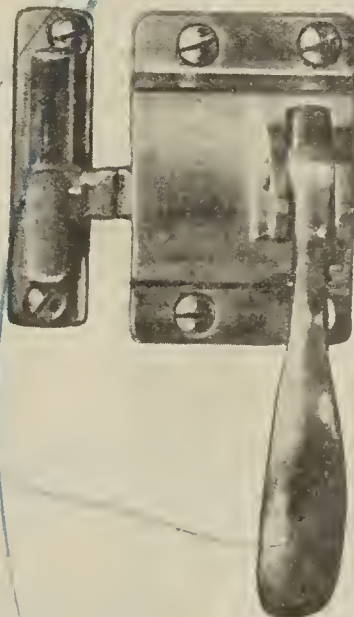


ROLLER TYPE

| Nos. | Length Lever, Inches | Size Case, Inches | Offset, Inches | Per Dozen |
|-------|-------------------------|------------------------------------|---|--------------|
| *281A | 3 | $1\frac{7}{8} \times 1\frac{5}{8}$ | Flush, $\frac{1}{8}, \frac{5}{32}, \frac{3}{8}, \frac{7}{16}$ | \$12.60 |
| 35B | $3\frac{1}{4}$ | $1\frac{1}{2} \times 2\frac{1}{4}$ | $\frac{3}{32}, \frac{3}{8}, \frac{5}{8}, \frac{3}{4}$ | 13.20 |
| *282A | 4 | $1\frac{7}{8} \times 2\frac{1}{4}$ | Flush, $\frac{3}{8}, \frac{7}{16}, \frac{5}{8}, \frac{3}{4}, 1\frac{1}{16}$ | 18.00 |
| 60B | $4\frac{1}{2}$ | $2\frac{1}{8} \times 2\frac{3}{4}$ | Flush, $\frac{3}{4}, 1, 1\frac{1}{8}$ | 23.40 |
| 291A | $5\frac{1}{2}$ | $2\frac{1}{2} \times 3$ | $\frac{3}{4}, \frac{7}{8}, 1, 1\frac{1}{8}$ | 36.00 |

*Carried in stock, flush $\frac{1}{16}$ offset.

SERVICE DOOR FASTENERS



ROLLER BOLT—SPRING ACTION—AUTOMATIC CLOSING

When door is opened, bolt remains back and is automatically released as roller strikes projection on keeper. Made of polished cast brass with narrow keeper. Furnished left and right hand. Illustration shows left hand. Regularly equipped to take padlock.

| Nos. | Length Lever, Inches | Size Case, Inches | Offset, Inches | Per Dozen |
|------|-------------------------|------------------------------------|---|--------------|
| 49B | $4\frac{1}{4}$ | 2 x 3 | Flush, $\frac{3}{8}, \frac{7}{16}, \frac{1}{2}, \frac{5}{8}, \frac{9}{16}, \frac{3}{4}, \frac{7}{8}, 1, 1\frac{1}{8}$ | \$24.00 |
| 32B | 5 | $2\frac{3}{8} \times 3\frac{5}{8}$ | $\frac{7}{16}, \frac{5}{8}, \frac{3}{4}, \frac{13}{16}, \frac{7}{8}, 1, 1\frac{1}{8}, 1\frac{1}{4}, \frac{13}{8}, 1\frac{1}{2}$ | 42.00 |
| 70B | $6\frac{1}{4}$ | $3\frac{1}{4} \times 4\frac{1}{4}$ | $\frac{3}{4}, \frac{7}{8}, 1, 1\frac{1}{8}$ | 75.00 |

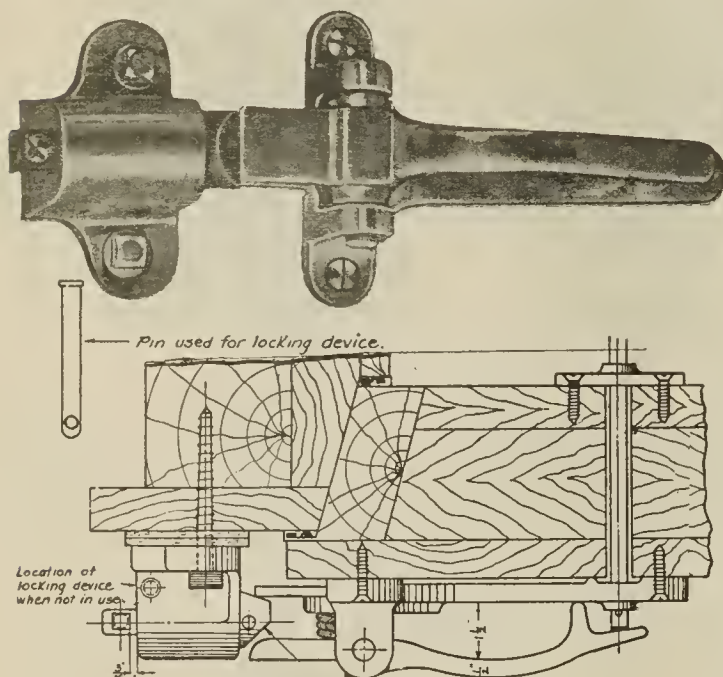
$\frac{7}{8}$ offset carried in stock.

We have specialized in the manufacture of refrigerator hardware for many years and with it goes the experience gained in supplying the varied demands of the trade over this long period of time.

All our hardware is made from the highest grade of raw materials by experienced workmen and our reputation among the trade speaks for the quality, excellence and durability of the hardware we manufacture.

REFRIGERATOR FASTENERS

SEAL TYTNER—AUTOMATIC



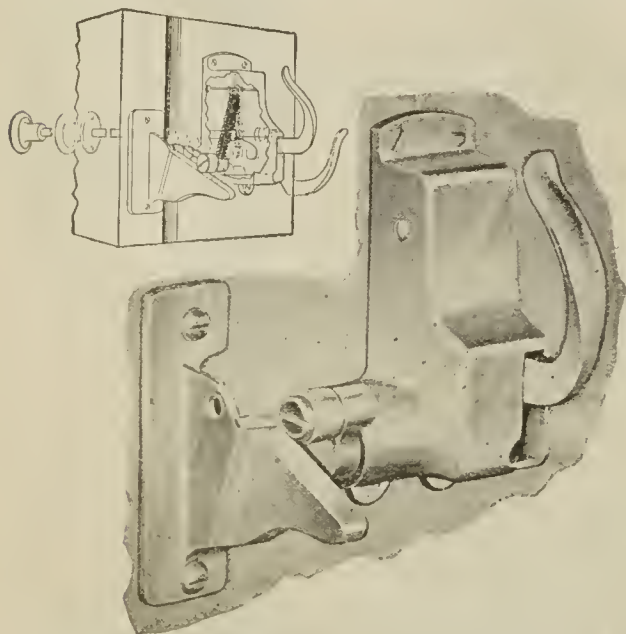
After door is opened bolt remains back and is automatically released by a projection on the keeper. Uses wedge principle of action, making a positively airtight door. Made with bolt and working parts made of non-corrosive, case hardened steel. Furnished with locking pin and with inside push knob to unlock door from the inside. Reversible; can be used left or right hand. All screws and bolts are supplied with each fastener. Furnished flush. $\frac{1}{4}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$ and $1\frac{1}{2}$ inches offset.

| Nos. | Length Lever, Inches | Length Case, Inches | Length Keeper, Inches | Width of Keeper, Inches | Each |
|------|-------------------------|------------------------|--------------------------|----------------------------|---------|
| 3 | $5\frac{3}{4}$ | 7 | $4\frac{1}{2}$ | $2\frac{1}{2}$ | \$14.00 |
| 30 | 5 | $2\frac{1}{2}$ | $4\frac{1}{2}$ | $2\frac{1}{2}$ | 11.20 |

Polished Brass, Prices Upon Application

ENTRANCE DOOR FASTENERS

AUTOMATIC ACTION—ROLLER BOLT



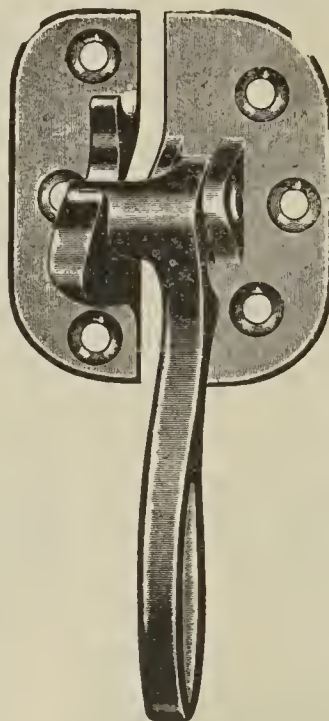
Pulling lever wedges the bolt in the deep vee slot in the keeper. Extremely powerful wedge action assures an airtight door when closed. Keeper also has opening for padlock. Furnished also with inside push knob so that door can be opened from the inside. Furnished for right or left hand, illustration shows left hand. Polished cast brass.

No. 37B—Length Lever, 5 Inches; Size of Keeper, $1\frac{7}{8} \times 6\frac{1}{4}$ Inches; Offsets, $\frac{5}{8}$, $\frac{3}{4}$, $1\frac{1}{8}$, $\frac{7}{8}$, $1\frac{1}{8}$, 1 and $1\frac{1}{4}$ Inches\$15.50

REFRIGERATOR FASTENERS

STANDARD

Style 5477



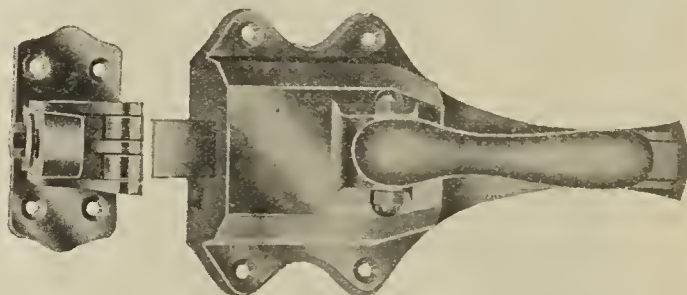
Cast brass, polished; made right and left hand with either flush or $\frac{1}{16}$ -inch offset striking plate, as specified on order. Holds doors without strain on the rivet. Illustration shows left hand.

| Nos. | Length Lever, Inches | Length Overall, Inches | Per Dozen Brass |
|----------------|----------------------------|------------------------------|-----------------------|
| 1 | $2\frac{1}{8}$ | $2\frac{7}{8}$ | \$8.75 |
| 2 | $2\frac{1}{2}$ | $3\frac{1}{2}$ | 9.00 |
| $2\frac{1}{2}$ | $3\frac{1}{4}$ | $4\frac{1}{4}$ | 11.00 |
| 3 | 4 | 5 | 12.00 |
| 4 | $4\frac{1}{4}$ | $5\frac{1}{2}$ | 16.00 |
| 5 | $4\frac{3}{4}$ | $6\frac{1}{4}$ | 30.00 |
| 6 | $5\frac{3}{4}$ | $7\frac{1}{2}$ | 42.00 |

Note—Unless otherwise specified, offset fasteners are furnished on orders.

Other Size Offsets Can be
Furnished to Order

MAIN DOOR FASTENER LOCKS



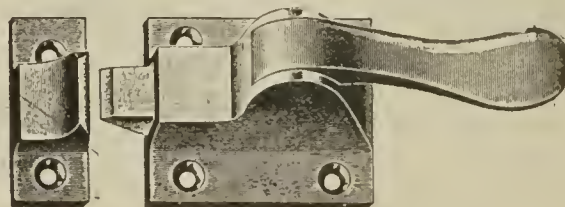
Patent Applied For
STYLE No. 98B

For cooler doors. Reversible for right or left hand door. Keeper adjustable for offsets $\frac{5}{8}$ to $1\frac{1}{8}$ inch offset. Double spring action. Compression type. Push knob inside control. Padlock device. When locked, door cannot be opened by removing adjusting nut on keeper. Easy latching. Durable. Supplied in any finish.

| No. | Length Case, Inches | Width, Inches | Keeper Length, Inches | Width, Inches | N. P., Each |
|-----|---------------------------|------------------|-----------------------------|------------------|----------------|
| 98B | $10\frac{1}{2}$ | $5\frac{1}{4}$ | $4\frac{1}{4}$ | 2 | \$17.00 |

Nickel Plated carried in stock

REFRIGERATOR LATCHES



Style 5503

Reversible cast brass refrigerator latches; broad flat lever handle; brass spring latch; regularly made for flush doors but may be had with a nosing for $\frac{1}{16}$ inch offset at slight extra cost. Polished brass finish. Nos. 1, 2 and 3 have open backs, others closed.

| Nos. | Size, Inches | Per Dozen |
|------|------------------------------------|-----------|
| 1 | $1\frac{1}{2} \times 1\frac{1}{2}$ | \$9.00 |
| 2 | $1\frac{3}{4} \times 1\frac{3}{4}$ | 10.50 |
| 3 | $2 \times 2\frac{1}{4}$ | 14.00 |

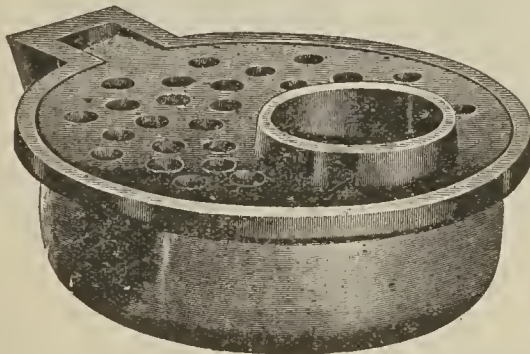
Note—Other size offset nosings can be furnished to order.

REFRIGERATOR TRAPS



| | Size, Inches | Pipe, Inches | Per Dozen | |
|-----|-----------------|-----------------|---------------|---------------|
| | | | Galv. Iron | Pol. Brass |
| 929 | 3 1/4 | 3/4, 1 | \$7.20 | \$13.50 |

REFRIGERATOR FLOOR TRAPS



CAST BRASS POLISHED

Style 5795

Prevents stoppage of waste pipes; can be set into wood or cement floors. Made of cast brass, polished natural brass finish.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 1 | 2 7/8 | \$20.00 |
| 2 | 4 | 36.00 |
| 3 | 6 | 84.00 |

OPEN VENTS

OBLONG PATTERN

Style 5797

Used on refrigerators, food storage rooms, etc. Cast brass, highly polished natural brass finish.

No. 10—Size, 1 3/4 x 1 1/4 Inches **\$3.90**



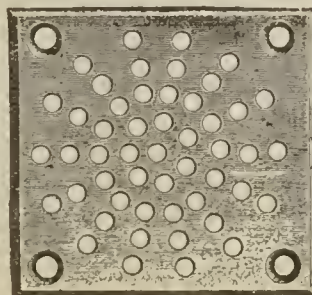
SQUARE PATTERN

Style 5799

Cast brass, polished finish; used on refrigerators, food storage rooms, etc.

Per Dozen

No. 20—Size, 2 x 2 Inches **\$4.00**

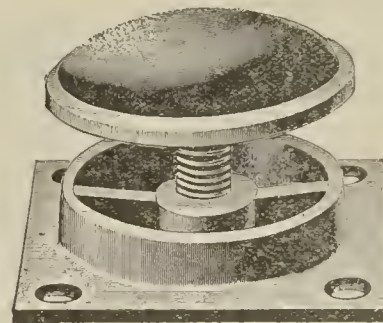


VENTILATORS

CAST BRASS

Style 5803

Makes a tight connection when closed; can be opened to any desired position; will not rattle either open or shut. Used on refrigerators, bulkheads, etc. Made of cast brass polished.



| Nos. | Size, Inches | Per Dozen |
|------|---------------|-----------|
| 0 | 2 1/2 x 2 1/2 | \$12.00 |
| 1 | 3 x 3 | 20.50 |
| 2 | 4 x 4 | 33.00 |

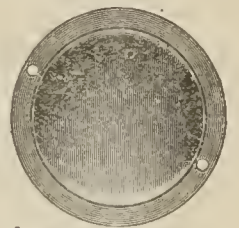
BOLT CAPS

WROUGHT BRASS

Style 5791

Wrought brass, polished finish; used to cover exposed bolt heads and nuts.

| No. | Size, Inches | Per Gross | |
|----------|----------------|---------------|------------------|
| | | Pol. Brass | Nickel Plated |
| No. 2957 | Size, 2 Inches | \$11.30 | \$12.45 |



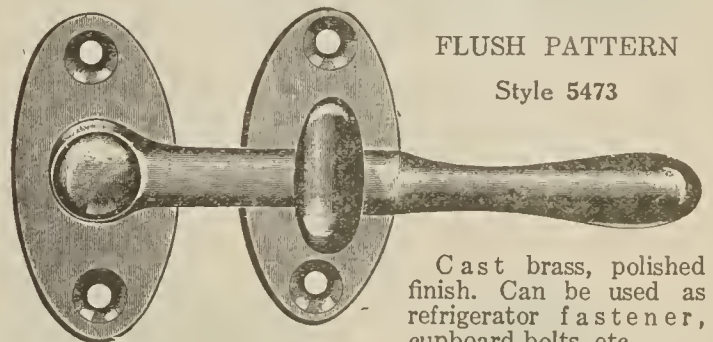
HEAVY GAUGE WROUGHT BRASS

| No. | Size, Inches | Per Gross | |
|----------|--------------|---------------|------------------|
| | | Pol. Brass | Nickel Plated |
| 2957 1/2 | 2 | \$16.80 | \$18.48 |

SURFACE LEVERS

FLUSH PATTERN

Style 5473



Cast brass, polished finish. Can be used as refrigerator fastener, cupboard bolts, etc.

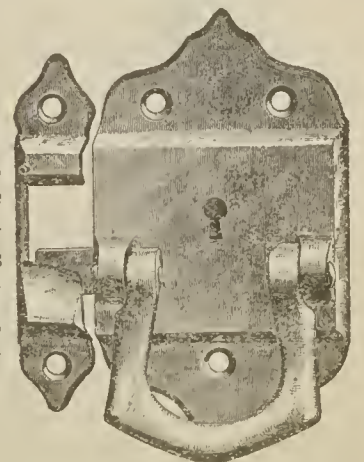
No. 1—Size, 4 1/2 Inches **\$8.60**

REFRIGERATOR LOCKS

CAST BRASS

Style 5497

Heavy cast brass lock, highly polished, with strike for 3/8-inch offset; not reversible; illustration shows Left Hand lock; one key furnished with each lock; made in flush and offset patterns.



No. 1—Offset, 3/8 inch **\$17.50**

Note—In ordering specify hand and type as offset is furnished unless otherwise specified.

SHIPS TELEGRAPH
LOW STAND—SINGLE ENGINE
With Reply Markings as Required
POLISHED BRASS



Fig. P-791

| Size Nos. | Diam. Over-all, Inches | Diam. of Dial, Inches | Height Over-all, Inches | Height to Center, Inches | Est. Weight Per Set in Lbs. | Price per Set Polished Brass |
|-----------|------------------------|-----------------------|-------------------------|--------------------------|-----------------------------|------------------------------|
| 111 | 7 5/8 | 6 | 14 5/8 | 7 1/2 | 36 | \$95.00 |
| 112 | 9 5/8 | 8 | 17 7/8 | 8 1/2 | .. | 150.00 |

A set consists of one Transmitter and one Receiver

LOW STAND—DOUBLE ENGINE
With Reply Markings as Required
POLISHED BRASS

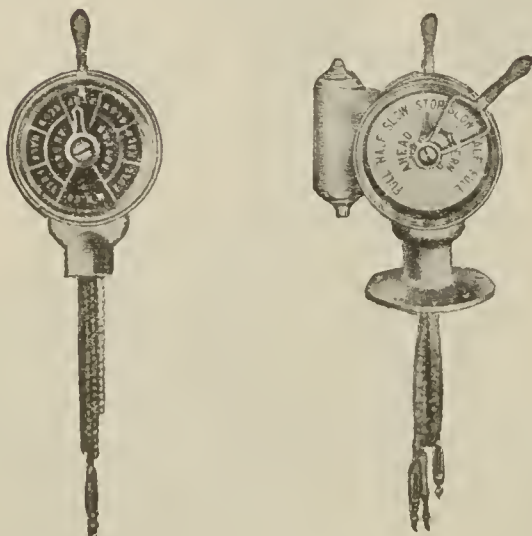


Fig. P-7910

| Size Nos. | Diam. Over-all, Inches | Diam. of Dial, Inches | Height Over-all, Inches | Height to Center, Inches | Est. Weight Per Set in Lbs. | Price per Set Polished Brass |
|-----------|------------------------|-----------------------|-------------------------|--------------------------|-----------------------------|------------------------------|
| 131 | 7 5/8 | 6 | 14 5/8 | 7 1/2 | 67 | \$147.00 |
| 132 | 9 5/8 | 8 | 17 7/8 | 8 1/2 | .. | 231.00 |

A set consists of one Transmitter and two Receivers

SHIPS TELEGRAPH
BULKHEAD—SINGLE ENGINE
STANDARD TYPE
With Reply Markings as Required
POLISHED BRASS

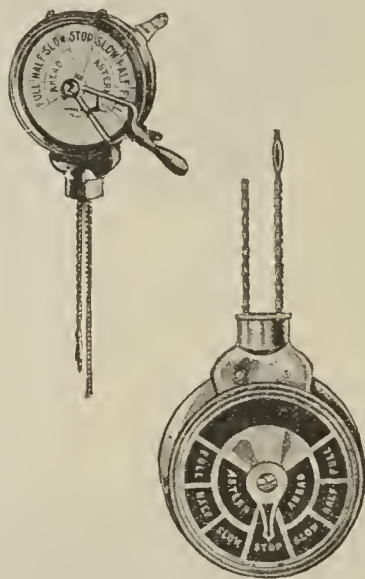


Fig. P-792

| Size Nos. | Diameter Over-All, Inches | Diameter of Dial, Inches | Est. Weight, Each in Lbs. | Price per Set Polished Brass |
|-----------|---------------------------|--------------------------|---------------------------|------------------------------|
| 1 | 5 5/8 | 4 | 25 | \$ 66.00 |
| 2 | 7 5/8 | 6 | 35 | 83.00 |
| 3 | 9 5/8 | 8 | 50 | 116.00 |
| 4 | 11 5/8 | 10 | 65 | 165.00 |

A set consists of one Transmitter and one Receiver

PEDESTAL—SINGLE ENGINE
STANDARD TYPE
With Reply Markings as Required
POLISHED BRASS

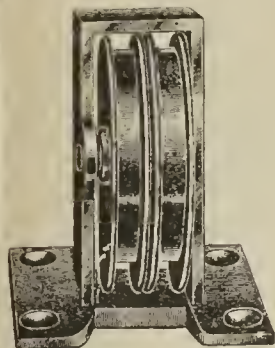


Fig. P-793

| Size Nos. | Diam. Over-all, Inches | Diam. of Dial, Inches | Height Over-all, Inches | Height to Center, Inches | Est. Weight Each in Lbs. | Price per Set Polished Brass |
|-----------|------------------------|-----------------------|-------------------------|--------------------------|--------------------------|------------------------------|
| 10 | 5 5/8 | 4 | 31 7/8 | 25 3/4 | 50 | \$ 85.00 |
| 11 | 7 5/8 | 6 | 41 3/4 | 34 5/8 | 60 | 109.00 |
| 12 | 9 5/8 | 8 | 44 3/4 | 35 3/8 | 75 | 158.00 |
| 13 | 11 5/8 | 10 | 46 1/2 | 36 1/4 | 95 | 198.00 |
| 14 | 13 5/8 | 12 | 49 | 38 | 160 | 297.00 |

A set consists of one Transmitter and one Receiver

TELEGRAPH AND BELL PULLEYS



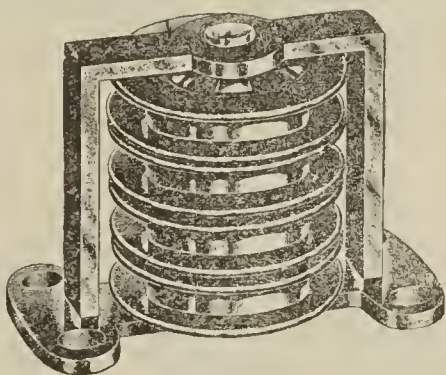
UPRIGHT
Style 5891

Made of cast brass; plain finish with turned sheaves and heavy brass axle. Furnished in one, two and four wheel types in two sizes. Used in conjunction with bell chain.

| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4001 | 2 | 1 | \$1.00 |
| 4002 | 2 | 2 | 1.50 |
| 4003 | 2 | 4 | 3.50 |

SIDE
Style 5893

Furnished in one, two and four wheel types in two sizes. Made of cast brass, plain finish, with turned sheaves and heavy brass axle. Used in conjunction with bell chain.



| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4007 | 2 | 1 | \$1.00 |
| 4008 | 2 | 2 | 1.50 |
| 4009 | 2 | 4 | 3.50 |

| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4004 | 3 1/2 | 1 | \$1.75 |
| 4005 | 3 1/2 | 2 | 2.25 |
| | ... | .. | |

MORTISE
Style 5895

Made of cast brass, plain finish, with turned sheaves and heavy brass axle. Furnished in one, two and four wheel types in two sizes.

| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4016 | 2 | 2 | \$2.00 |
| 4017 | 2 | 4 | 4.00 |

OFFSET
Style 5897

Furnished in one, two and four wheel types in two sizes. Made of cast brass, plain finish, with turned sheaves and heavy brass axle.

| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4022 | 2 | 1 | \$1.00 |
| 4023 | 2 | 2 | 1.75 |
| 4024 | 2 | 4 | 3.50 |



TANDEM
Style 5899

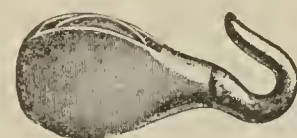
Made of cast brass, plain finish, with turned sheaves and heavy brass axles. Furnished in two, four and eight wheel types in two sizes.

| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4028 | 2 | 2 | \$2.00 |
| 4029 | 2 | 4 | 4.00 |

SWIVEL BLOCKS

FOR WHISTLE CORDS
Style 5907

Made of cast brass, polished brass finish with turned sheaves, swivel open hooks. Furnished in single and double wheel types.

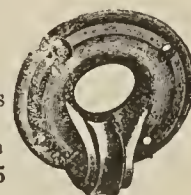


| Nos. | Size, Inches | Number of Wheels | Each |
|------|--------------|------------------|--------|
| 4039 | 2 1/2 | 1 | \$2.40 |
| 4040 | 2 1/2 | 2 | 3.35 |

COAMING BUSHINGS

FOR WHISTLE CORDS
Style 5905

Made of cast brass, polished natural brass finish with turned sheave.



Per Dozen
No. 4038—Diameter, 2 5/8 Inches. \$15.85

ROLLER WIRE BEARERS

VERTICAL TYPE
Style 5921

Cast brass, plain finish with turned sheaves. Furnished in four and eight wheel patterns.



| No. | Number of Wheels | Size Base, Inches | Each |
|------|------------------|-------------------|--------|
| 4053 | 4 | 3/4 x 2 1/2 | \$1.10 |

HORIZONTAL TYPE
Style 5923

Cast brass, plain finish with turned sheaves. Furnished in eight wheel pattern only.



| No. | Number of Wheels | Size Base, Inches | Each |
|------|------------------|-------------------|--------|
| 4056 | 8 | 3/4 x 4 1/8 | \$1.50 |

WIRE BEARERS

VERTICAL TYPE
Style 5925

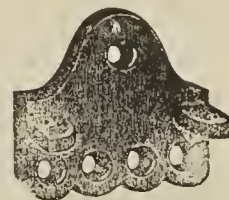
Made of cast brass, plain finish; with holes drilled and reamed.



Each
No. 4057—Size Base, 1 1/8 x 1 3/4 Inches. \$0.75

SIDE TYPE
Style 5929

Cast brass, plain finish; with holes drilled and reamed.



Each
No. 4059—Size Base, 2 1/8 x 1 1/8 Inches \$0.75

HORIZONTAL TYPE
Style 5927

Made of cast brass, plain finish; with holes drilled and reamed.



Each
No. 4058—Size Base, 1/8 x 2 1/8 Inches \$1.10

Class Information

Class One—Less than 26 feet in length.
Class Two—26 feet or over and less than 40 feet in length.
Class Three—40 feet or over and not more than 65 feet.

BELL WIRE



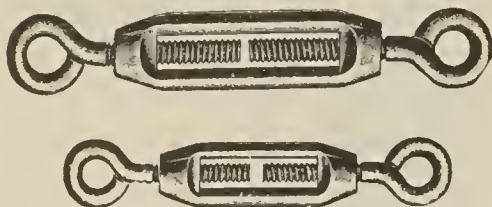
BRONZE
For use with ships bells.
Bronze wire in coils.
Nos 4067 Gauge Wire, 11 Per Pound
Prices on Application

WIRE SLEEVES

Style 5919
Wrought brass; plain finish; for use with ships signal bell wire. Furnished in two sizes.
Description Size, Inches Eac
Standard 1/16 x 1 3/8 \$0.09
Large 1/16 x 1 3/4 .24



BELL WIRE TURNBUCKLES



| Style 5935 | | | Case is cast in one piece insuring reliability and strength. Eye ends have full right and left hand threads. | | |
|------------|-------------------------|--------|--|-------------------------|--------|
| Nos. | Length Extended, Inches | Each | Nos. | Length Extended, Inches | Each |
| 1 | 3 | \$0.15 | 4 | 5 3/4 | \$0.30 |
| 2 | 4 | .20 | 5 | 6 7/8 | .40 |
| 3 | 5 | .25 | .. | .. | .. |

TELEGRAPH TURNBUCKLES



Style 5937
Cast brass body; one end threaded, other end with swivel; with through spindle threaded and with lock nut.
Nos. Length Closed, Inches Length Open, Inches Each
4068 4 3/8 6 \$1.80
4069 6 1/2 8 3/4 3.60

BELL SPRINGS

Brass wire bell springs with wire loop eye ends.



| Nos | Size, Inches | Gauge, Wire | Each |
|------|--------------|-------------|------------|
| 4060 | 6 | 17 | \$ |
| 4061 | 8 | 16 | .. |
| 4063 | 12 | 14 | .. |
| 4064 | 12 | 12 Heavy | .. |
| 4065 | 18 | 12 Heavy | .. |

Prices Upon Application

LINKS FOR TELEGRAPH AND BELL CHAIN



END LINKS
Style 5917
Wrought brass; for connecting chain and wire.
End Chain Links \$0.08

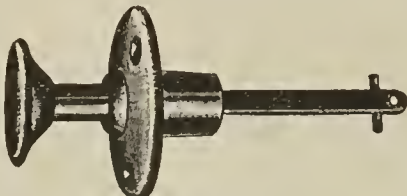
REVERSE LINKS



For rigging chain around corners. Made of wrought brass.
Reverse Links \$0.24

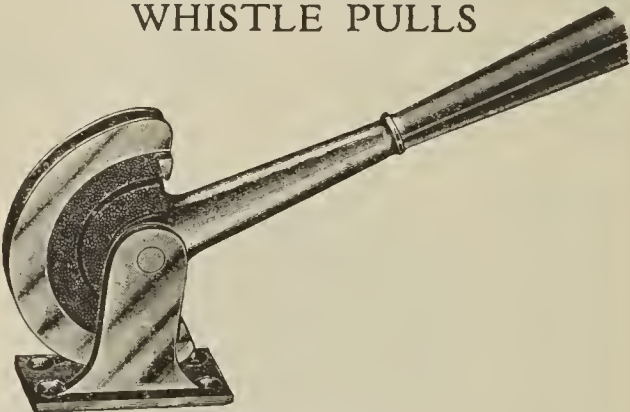
Tiebout Marine Hardware is used today in practically all of the famous ship yards for every kind and class of boat and vessel.

BELL PULLS



POST PATTERN
Style 5945
Made of cast brass; highly polished; with knob or ring handle.
Length Pull, Inches Type: Handle Knob Ring Each
4071 3 1/2 \$
4072 3 1/2
Prices Upon Application

WHISTLE PULLS



LEVER TYPE
Style 5943
Made of cast brass; highly polished natural brass finish. Size of base, 1 1/2 x 4 inches; length of handle, 9 3/4 inches.
No. 4070 \$15.00

WHISTLE CORD PULLS

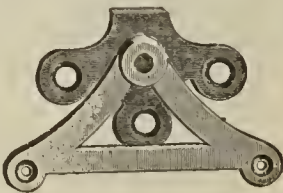


WOOD
Made of hard wood, sanded finish. For rope pulls.
No. 4073—Size, 1 3/4 x 5 1/2 Inches. on application

BELL CRANKS

SIDE PATTERN

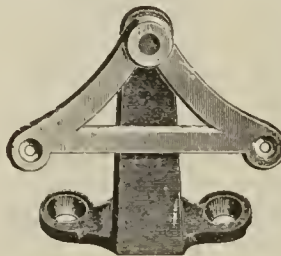
Style 5901
Made of cast brass, plain finish. For fastening to sides of bulkheads or cabin walls, etc. Furnished in heavy and extra heavy.



| Nos. | Description | Each |
|------|-------------|--------|
| 4034 | Heavy | \$0.85 |
| 4035 | Extra Heavy | 1.15 |

UPRIGHT PATTERN

Style 5903
For fastening to pillars, posts, cabin ceilings, etc. Made of cast brass, plain finish. Furnished in heavy and extra heavy.



| Nos. | Description | Each |
|------|-------------|--------|
| 4036 | Heavy | \$1.15 |
| 4037 | Extra Heavy | 1.30 |

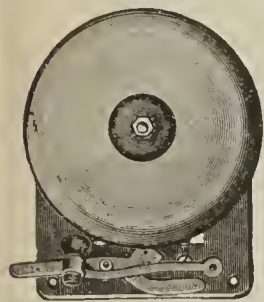
TELEGRAPH AND BELL CHAIN



Style 5913
Wrought brass riveted link chain for ships, telegraph or bell chain signal service.
Telegraph and Bell Chain \$0.50
Note—12, 18 and 24 inch lengths with end links carried in stock.

TRIP GONGS

Style 5875



Polished bell metal gong; japanned cast iron back plate and bell post; cast brass trip lever and hammer bar; two tempered brass wire coil springs; 2 to 8 inch gongs have metal hammer heads; 9 to 24 inch gongs have wood hammer heads; made also in right and left hand, right being supplied on all orders, unless otherwise specified.

| Nos. | Size, Inches | Weight Each, Lbs. | Each | Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|--------------|-------------------|--------|------|--------------|-------------------|---------|
| 3046 | 2 | $\frac{7}{8}$ | \$1.45 | 3054 | 10 | 11 | \$13.40 |
| 3047 | 3 | $1\frac{1}{8}$ | 1.50 | 3055 | 12 | 16 | 22.50 |
| 3048 | 4 | $1\frac{7}{8}$ | 1.80 | 3056 | 15 | $30\frac{3}{8}$ | 35.70 |
| 3049 | 5 | $2\frac{1}{8}$ | 2.50 | 3057 | 16 | 35 | 41.20 |
| 3050 | 6 | $2\frac{9}{16}$ | 3.80 | 3058 | 18 | $40\frac{3}{4}$ | 49.00 |
| 3051 | 7 | $5\frac{1}{4}$ | 5.40 | 3059 | 20 | 65 | 76.00 |
| 3052 | 8 | $6\frac{1}{4}$ | 7.80 | 3060 | 24 | 82 | 182.20 |
| 3053 | 9 | 10 | 11.10 | | | | |

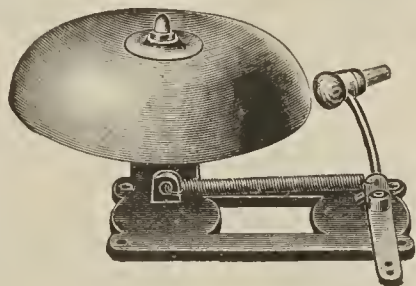
Furnished with brass base to order only. Prices on application.

PULL GONGS

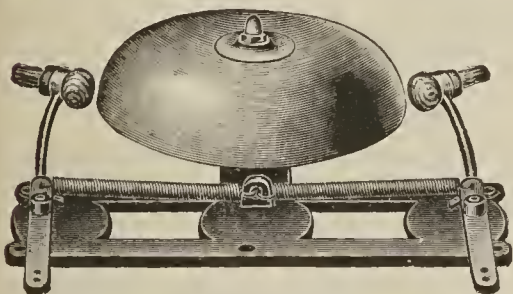
SINGLE HAMMER

Style 5877

Pull and let go gong made of polished bell metal with japanned iron base; brass spring; furnished with wood hammers in sizes over 8 inches.



| Nos. | Size, Inches | Weight Each, Lbs. | Each | Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|--------------|-------------------|--------|------|--------------|-------------------|---------|
| 3061 | 6 | $2\frac{7}{8}$ | \$3.16 | 3065 | 14 | $21\frac{1}{4}$ | \$27.80 |
| 3062 | 8 | $5\frac{1}{4}$ | 5.90 | 3066 | 16 | $28\frac{3}{4}$ | 34.20 |
| 3063 | 10 | $9\frac{1}{3}$ | 10.80 | 3067 | 18 | $33\frac{3}{8}$ | 41.20 |
| 3064 | 12 | $14\frac{3}{4}$ | 19.00 | 3068 | 20 | 58 | 61.75 |

DOUBLE HAMMER
Style 5879

Construction of this double hammer gong is the same as for the single hammer gong; wood ham-

mers are supplied on all sizes over 8 inches.

| Nos. | Size, Inches | Weight Each, Lbs. | Each | Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|--------------|-------------------|--------|------|--------------|-------------------|---------|
| 3060 | 6 | $4\frac{3}{8}$ | \$3.80 | 3073 | 14 | $21\frac{3}{8}$ | \$33.75 |
| 3070 | 8 | $6\frac{1}{4}$ | 7.30 | 3074 | 16 | 43 | 41.20 |
| 3071 | 10 | 13 | 13.30 | 3075 | 18 | 45 | 49.00 |
| 3072 | 12 | $16\frac{5}{8}$ | 23.75 | 3076 | 20 | 67 | 76.00 |

Note: Above gongs can be furnished with brass base. Prices on application.

JINGLE BELLS

Style 5881

Made of cast brass; polished natural brass finish; clappers are suspended from a heavy brass loop cast into the bell.

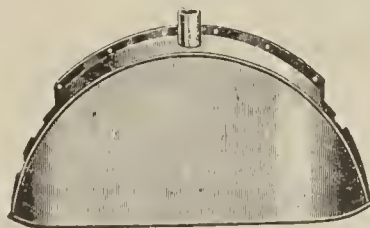
| Size, Inches | Weight per Dozen, Lbs. | Each |
|----------------|------------------------|--------|
| $2\frac{1}{2}$ | $7\frac{1}{2}$ | \$2.50 |
| 3 | 9 | 3.00 |
| $3\frac{1}{2}$ | 12 | 3.50 |
| 4 | 15 | 4.00 |
| $4\frac{1}{2}$ | 20 | 4.50 |



ENGINE ROOM SOUNDERS

WROUGHT BRASS

Made of wrought brass; highly polished finish; used in engine room to cover gong and throw sound down.



Style 5889

| For Gong, Inches | Each |
|------------------|---------|
| 10 | \$22.50 |
| 12 | 25.50 |
| 16 | 36.00 |

BELL PULLS

CAST BRASS

Style 5939

With straight handles; cast brass; highly polished finish.



| Nos. | Length Over-all, Inches | Each | Nos. | Length Over-all, Inches | Each |
|------|-------------------------|--------|------|-------------------------|--------|
| 1 | 8 | \$1.55 | 3 | $10\frac{1}{2}$ | \$2.33 |
| 2 | 10 | 2.07 | *4 | 12 | 6.00 |

* Has rubber cushion.



With loop handles; cast brass; highly polished finish.

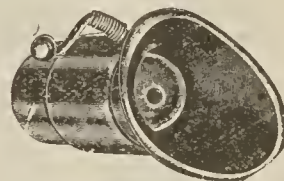
| Nos. | Length Ov. rall, Inches | Each |
|------|-------------------------|--------|
| 1 | 8 | \$1.75 |
| 2 | 10 | 2.50 |
| 3 | $10\frac{1}{2}$ | 2.30 |
| 4 | 12 | 6.30 |

WHISTLE MOUTHPIECES

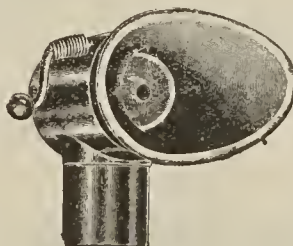
STRAIGHT

Style 5949

Cast brass; highly polished finish with spring whistle lever which automatically keeps whistle in place to receive signals.



| Size, Inches | Each | Size, inches | Each |
|----------------|--------|--------------|--------|
| $1\frac{1}{2}$ | \$5.50 | 2 | \$7.70 |



ELBOW

Style 5951

Cast brass; highly polished natural brass finish; with spring lever which automatically keeps whistle in place to receive signals.

| Size, Inches | Each | Size, Inches | Each |
|----------------|--------|--------------|--------|
| $1\frac{1}{2}$ | \$5.50 | 2 | \$7.70 |

STRAIGHT—COVERED

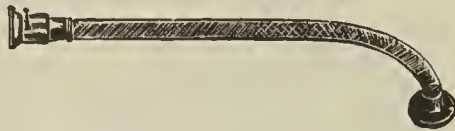
Style 5953

Used in pilot house or engine room; whistle is always in position to receive signals; has collar for pilot house sounders; made of cast brass; highly polished natural brass finish.



| Size, Inches | Each |
|----------------|--------|
| $1\frac{1}{2}$ | \$7.70 |
| 2 | 8.80 |

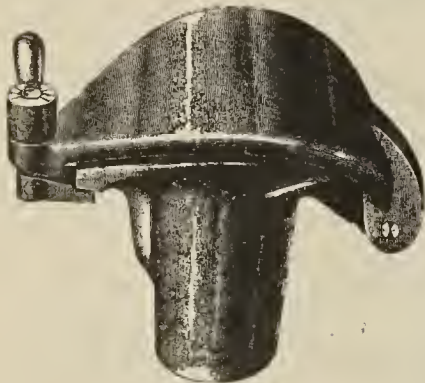
WHISTLE MOUTHPIECES



FLEXIBLE
Style 5957

Complete with cast brass mouthpiece, fitting and wall hanger. Tubing is composed of spiral steel wire, rubber and cloth covered. Length of set, 36 inches.

| Size, Inches | Each | Size, Inches | Each |
|--------------|---------|--------------|---------|
| 1 | \$11.25 | 1 1/4 | \$12.70 |



STEAM TIGHT
STRAIGHT

Style 5955

Cast brass highly polished, natural brass finish; with steam tight cover held fast by bolt with lever nut.

| Size, Inches | Each | Size, Inches | Each |
|--------------|---------|--------------|---------|
| 1 1/2 | \$..... | 2 | \$..... |

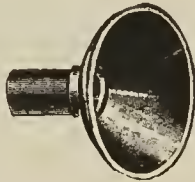
Prices on Application

PILOT HOUSE SOUNDERS

STRAIGHT
Style 5885

Made of spun brass, polished brass finish. Furnished to fit all standard sizes of speaking tubes. Collar is drilled and reamed to make a tight joint without soldering.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 1 1/2 | \$5.20 | 2 | \$6.00 |



ELBOW
Style 5887

Spun brass, polished natural brass finish. Furnished to fit all standard sizes of speaking tubes. Collar is drilled and reamed to make a tight joint without soldering.



| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 1 1/2 | \$5.50 | 2 | \$6.60 |

SPEAKING TUBE

SEAMLESS
Style 5973

Made of cold drawn brass, plain finish. Being air tight, it gives perfect satisfaction

| Outside Diameter, Inches | Per Hundred Feet | Outside Diameter, Inches | Per Hundred Feet |
|--------------------------|------------------|--------------------------|------------------|
| 1 1/2 | \$..... | 2 | \$..... |



Prices on Application

SPEAKING TUBE FITTINGS

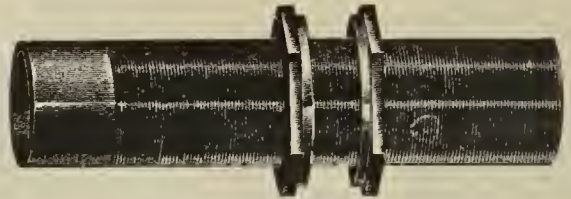
90° ELBOWS CAST BRASS
Style 5961

Made of cast brass; plain finish. Collars drilled and reamed to make a tight joint without soldering.



| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 1 1/2 | \$2.20 | 2 | \$3.00 |

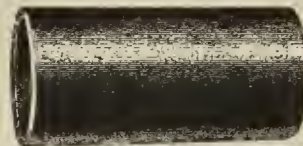
SPEAKING TUBE FITTINGS



DECK NIPPLES
Style 5969

Made of cast brass, plain finish with long thread. Furnished with two locking nuts to hold nipple rigid and keep connection waterproof.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 1x8 | \$2.20 | 1 1/2x8 | \$2.50 |
| 1 1/4x8 | 2.80 | 2 x8 | 4.00 |



SEAMLESS COUPLINGS
Style 5971

Made of cold drawn brass, plain finish. Makes an air-tight joint giving perfect satisfaction.

| Size, Inches | Each | Size, Each | Each |
|--------------|--------|------------|--------|
| 1 1/2 | \$0.65 | 2 | \$1.20 |

BOAT LETTERS

CAST BRASS
Style 6595

Made of solid cast brass; have holes for countersunk head wood screws.

| Size, Inches | Plain | Each | Polished |
|--------------|----------------|------|----------|
| 1 | \$... | | \$... |
| 1 1/2 | .08 | | .25 |
| 2 | .10 | | .25 |
| 2 1/2 | .14 | | .30 |
| 3 | .25 | | .35 |
| 4 | .50 | | 1.00 |
| 6 | on application | | |



Note—Extra heavy letters for cement sidewalks or gold-leaved letters, can be furnished to order.

EMBOSSSED—ALUMINUM



Embossed up round and full, broad-faced and very legible. Pure aluminum; polished finish; escutcheon pins are included.

Per 1000
Size, 3 Inches.....\$39.00

FIGURES

CAST BRASS
Style 6597

Made of solid cast brass; have holes for countersunk head wood screws.

| Size, Inches | Plain | Each | Polished | Size, Inches | Plain | Each | Polished |
|--------------|--------|--------|----------|--------------|----------------|--------|----------|
| 1 1/2 | \$0.08 | \$0.25 | | 3 | \$0.25 | \$0.35 | |
| 2 | .10 | .25 | | 4 | .50 | 1.00 | |
| 2 1/2 | .14 | .30 | | 6 | on application | | |



EMBOSSSED—ALUMINUM



Embossed up round and full, broad-faced and very legible. Pure aluminum; polished finish; escutcheon pins are included.

Per 1000
Size, 3 Inches.....\$39.00

Note—Above figures in three-inch height comply with government requirements when mounted on a contrasting background.

YACHTSMANS ANCHORS

FORGED STEEL—GALVANIZED

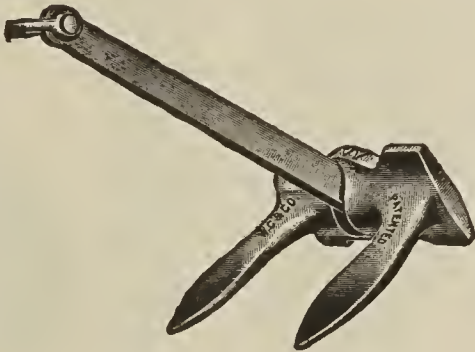


Scientifically designed; the sharp bill point and cutting edge of the flukes are ready to bite and bury at the slightest pull; the long shank which assures quick holding power and the radius of the crown are so designed that the first pull brings bill of the anchor into position to bite and hold instantly. Arms and reinforced flukes are forged from single bars under heavy drop hammers. Flukes are non-fouling, hold only the bottom—not the cable. Rounded crown will not mar the deck.

| Weight Each, Lbs. | Length, Inches | Each | Weight Each, Lbs. | Length, Inches | Each |
|----------------------|-------------------|--------|----------------------|-------------------|---------|
| 15 | 29 | \$6.00 | 75 | 46½ | \$22.50 |
| 25 | 36 | 7.50 | 100 | 50 | 30.00 |
| 35 | 40 | 10.50 | 125 | 52½ | 37.50 |
| 50 | 43 | 15.00 | 150 | 59 | 45.00 |
| 60 | 44½ | 18.00 | ... | ... | ... |

NAVY
PATTERN

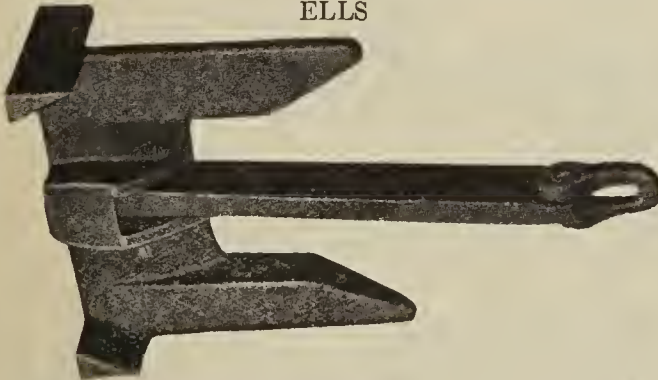
This anchor does not have to be stowed away as it hoists right into the hawse pipe and out of the way. It holds well on any bottom and will not foul the anchor line easily. There are no pockets in the head to bring mud on deck. Solid steel loose shank and shackle; malleable iron head; galvanized finish.



| Weight Each, Lbs. | Length, Inches | Each | Weight Each, Lbs. | Length, Inches | Each |
|----------------------|-------------------|--------|----------------------|-------------------|---------|
| 5 | 12 | \$1.80 | 50 | 25 | \$11.10 |
| 10 | 13 | 3.05 | 60 | 27 | 12.90 |
| 15 | 16 | 4.05 | 80 | 28 | 18.50 |
| 20 | 18 | 5.30 | 100 | 30 | 22.50 |
| 25 | 19 | 6.50 | 125 | 32 | 28.00 |
| 30 | 21 | 7.75 | 150 | 35 | 34.00 |
| 35 | 21 | 8.60 | 200 | 41 | 44.00 |
| 40 | 22 | 9.45 | ... | ... | ... |

Note—The larger sizes from 200 pounds are sold by the pound; prices on application. Government tolerances allowed in weight plus or minus 5 per cent.

ELLS



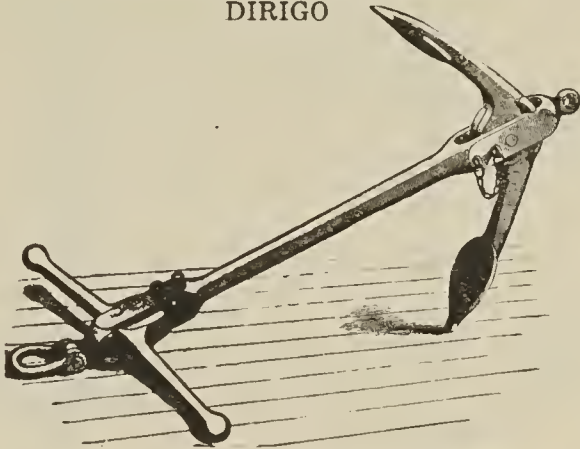
Stands double the strain of any other anchor of the same weight in any kind of bottom. Has holding power, weight for weight, far in excess of any known anchor. Takes less room; easier to handle; saves weight.

| Weight Each, Lbs. | Each | Weight Each, Lbs. | Per 100 Pounds |
|----------------------|-------|----------------------|-------------------|
| 5 | | 60 | ..... |
| 10 | | 75 | ..... |
| 20 | | 100 | ..... |
| 30 | | 150 | ..... |
| 40 | | 200 | ..... |
| 50 | | ... | |

Prices on Application

FOLDING ANCHORS

DIRIGO



Open



Closed

The only practical design in which both the stock and flukes fold up. The same pin is used for holding them in either open or closed position, it has all the advantages of a regular anchor when in use and is compact when stowed away. Made of malleable iron; hot galvanized finish.

| Weight Each, Lbs. | Length, Inches | Each | Weight Each, Lbs. | Length, Inches | Each |
|----------------------|-------------------|--------|----------------------|-------------------|---------|
| 6 | 19 | \$3.60 | 30 | 34 | \$16.00 |
| 10 | 24 | 6.00 | 35 | 36 | 19.00 |
| 15 | 28 | 8.50 | 45 | 38 | 24.00 |
| 20 | 30 | 11.00 | 55 | 41 | 29.00 |
| 25 | 32 | 13.50 | 76 | 44 | 39.00 |

KEDGE ANCHORS

GALVANIZED



Will hold on any bottom; bites quickly; holds firmly; possess maximum strength. Forged and welded steel stock; wide flukes, hot galvanized finish.

| Weight Each, Lbs. | Galv., Each | Japanned, Each | Weight Each, Lbs. | Galv., Each | Japanned, Each |
|----------------------|----------------|-------------------|----------------------|----------------|-------------------|
| 5 | \$2.80 | \$2.20 | 450 | \$87.00 | \$70.00 |
| 10 | 4.70 | 3.60 | 500 | 96.00 | 78.00 |
| 15 | 5.50 | 4.30 | 550 | 106.00 | 86.00 |
| 20 | 6.50 | 5.00 | 600 | 115.00 | 94.00 |
| 25 | 6.75 | 5.50 | 650 | 125.00 | 102.00 |
| 30 | 8.00 | 6.50 | 700 | 135.00 | 109.00 |
| 35 | 9.50 | 7.75 | ... | ... | ... |
| 40 | 11.00 | 8.75 | | | |
| 50 | 13.50 | 11.00 | | | |
| 60 | 14.00 | 11.50 | | | |
| 75 | 14.50 | 12.00 | | | |
| 100 | 19.00 | 15.50 | | | |

Note—Japanned anchors not regularly carried in stock.

ANCHOR KEYS

| No. | Size, Inches | For Anchors, Lbs. | Each |
|-----|--------------|-------------------|--------|
| 1 | 1½x 1¼x 1¼ | 5 | \$0.08 |
| 2 | 2½x 1½x 1½ | 8 to 18 | .11 |
| 3 | 3½x 1½x 1½ | 20 to 35 | .12 |
| 4 | 4½x 1½x 1½ | 40 to 150 | .18 |

TRAWL OR SAND ANCHORS



Fast Stock



Loose Folding Stock

BLACK AND GALVANIZED

For holding in sandy bottoms. Solid, forged steel; made with fast or loose, folding stock; black or hot galvanized finish. Also known as dory anchors.

| Weight Each, Lbs. | —Fast Stock, Each— | | —Loose Stock, Each— | |
|-------------------------|--------------------|------------|---------------------|------------|
| | Black | Galvanized | Black | Galvanized |
| 5 | \$1.65 | \$1.95 | \$1.75 | \$2.20 |
| 10 | 2.20 | 2.90 | 2.40 | 3.10 |
| 15 | 3.10 | 4.10 | 3.40 | 4.40 |
| 20 | 4.00 | 5.25 | 4.40 | 5.75 |
| 25 | 4.70 | 6.50 | 5.00 | 6.75 |
| 30 | 5.50 | 7.75 | 6.00 | 8.00 |
| 35 | 6.50 | 9.25 | 7.00 | 9.50 |
| 40 | 7.50 | 10.50 | 8.00 | 11.00 |
| 50 | 8.50 | 13.00 | 10.00 | 13.50 |
| 60 | 8.75 | 13.50 | 10.50 | 14.00 |
| 75 | 9.00 | 14.00 | 11.00 | 14.50 |
| 100 | 12.00 | 17.50 | 14.50 | 18.00 |

Note—Government tolerances allowed in weight, plus or minus 5 per cent.

MUSHROOM ANCHORS



PERFECTION—WIDE BOWL

For muddy bottoms. Has wide cast iron bowl with long steel shank and ring; shank firmly riveted to bowl. The most efficient anchor for mooring purposes.

| Size, Lbs. | Galvanized, Each | *Japanned, Each |
|---------------|---------------------|--------------------|
| 5 | \$1.60 | \$1.30 |
| 8 | 2.00 | 1.75 |
| 10 | 2.50 | 2.00 |
| 15 | 3.70 | 3.00 |
| 20 | 4.50 | 3.25 |
| 25 | 5.25 | 3.75 |
| 35 | 5.75 | 4.00 |
| 50 | 6.00 | 4.25 |
| 75 | 9.00 | 6.50 |
| 100 | 12.00 | 8.50 |
| 125 | 15.00 | 10.50 |
| 150 | 18.00 | 12.75 |
| 200 | 24.00 | 17.00 |
| 250 | 29.75 | 21.00 |
| 300 | 36.00 | 25.50 |
| 350 | 42.00 | 29.75 |
| 400 | 48.00 | 34.00 |
| 450 | 54.00 | 38.25 |
| 500 | 60.00 | 42.50 |

*Sizes 50 lbs. or larger are self-colored.

Mushroom Anchors up to 50 lbs. inclusive are equipped with rings. 75 lbs. upward are equipped with shackles.

BALANCING BANDS

GALVANIZED DROP FORGED STEEL

To be placed about the Anchor Shank at center of gravity to aid in handling. Particularly suited to Kedge and Yachtsmans Anchors.

Add 10% to the List Price if Anchors are ordered with Balancing Band.

MUSHROOM ANCHORS

WITH BULB SHANK

For muddy bottoms; bulb on shank eliminates using a riding weight, also causes anchor to turn on its side as soon as it reaches bottom. Has a shackle on the shank and a ring on the bowl for picking up. Shank made of malleable iron and riveted to bowl; cast iron bowl.



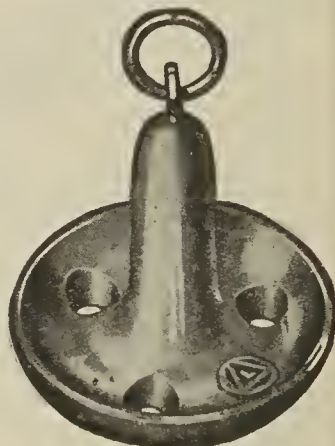
| Nos. | Weight Each, Lbs. | | Nos. | Weight Each, Lbs. | |
|------|-------------------------|--------|------|-------------------------|---------|
| | Lbs. | Each | | Lbs. | Each |
| 00 | 50 | \$9.00 | 7 | 300 | \$42.00 |
| 0 | 75 | 12.00 | 8 | 400 | 53.00 |
| 1 | 100 | 16.00 | 9 | 500 | 66.00 |
| 2 | 135 | 21.00 | 10 | 600 | 79.00 |
| 3 | 165 | 25.00 | 11 | 700 | 92.00 |
| 4 | 200 | 28.00 | 12 | 800 | 105.00 |
| 5 | 230 | 32.00 | 14 | 1000 | 132.00 |
| 6 | 265 | 37.00 | 15 | 1250 | 165.00 |

ANGLERS ANCHORS

For light craft such as canoes, rowboats, duckboats, motor boats, etc.

Made of cast iron with drop forged ring bolt. Edges are rounded and it is so shaped that it will not catch on roots or roll about in the boat. Has holes in the bowl which allow the mud to seep through and cause anchor to sink quickly.

| Weight Each, Lbs. | —Each— | |
|-------------------------|--------|------------|
| | Black | Galvanized |
| 7 | \$1.20 | \$1.60 |
| 11 | 1.75 | 2.40 |
| 15 | 2.40 | 3.20 |



WELL CREEPERS

For grappling or for use as an anchor on small boats.

Made of steel, welded into one piece with solid ring for attaching rope. Hot galvanized finish.

Each

No. 5011—Weight Each, 1½ Lbs.; Height, 6¾ Inches.....\$1.20



GRAPNELS

Made of steel. Solid eye between prongs for tripping; loose ring for attaching line. Galvanized finish.

| Weight Each, Lbs. | Each |
|----------------------|--------|
| 4 | \$2.00 |
| 6 | 2.40 |
| 8 | 3.00 |
| 10 | 3.20 |
| 15 | 4.80 |
| 20 | 6.50 |
| 25 | 8.00 |

Larger sizes furnished to order.



Table Showing Approximate Size of Anchor and Cable for Boats Under 90 Feet

| Length of Boat, Feet | Diameter | | Anchors, Pounds | |
|-------------------------|-----------------------|----------------------|-----------------|-------|
| | Rope Cable, Inches | Chain Cable, Inch | Ordinary | Heavy |
| Under 30 | 3/4 | 3/16 | 40 | 60 |
| 30 to 40 | 1 | 1/4 | 60 | 80 |
| 40 to 50 | 1 1/4 | 5/8 | 70 | 100 |
| 50 to 60 | 1 3/8 | 3/8 | 90 | 120 |
| 60 to 70 | 1 1/2 | 1/2 | 100 | 140 |
| 70 to 80 | 1 3/4 | 1/2 | 120 | 160 |
| 80 to 90 | 1 3/4 | 5/8 | 135 | 180 |

SEA ANCHOR OR MARINE DRAGS

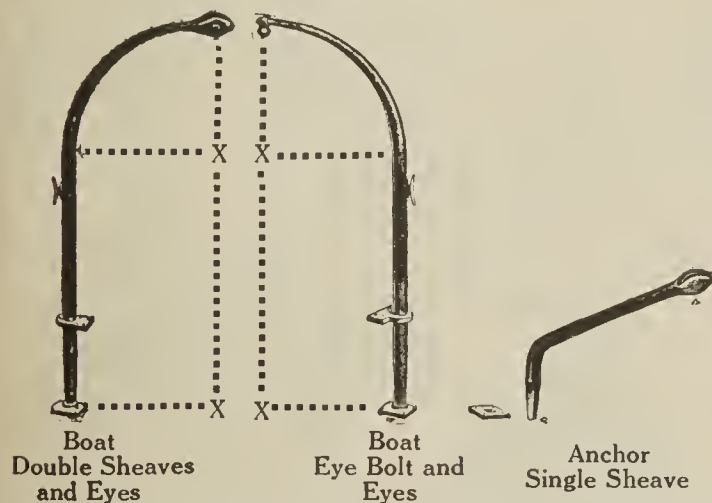


A necessary item for boats liable to be caught out in a blow. Made of heavy canvas, heavily sewed and fitted with a wrought iron ring and chain. Folds up so that it can be conveniently stowed. Furnished with or without a can for spreading oil on the surface of water. Approved by the Steamboat Inspection Service for life boats.

No. 10—Diameter, 24 Inches; Length, 36 Inches

| | Without Can | With Can |
|-------|-------------|----------|
| ..... | \$3.60 | \$5.60 |

DAVITS



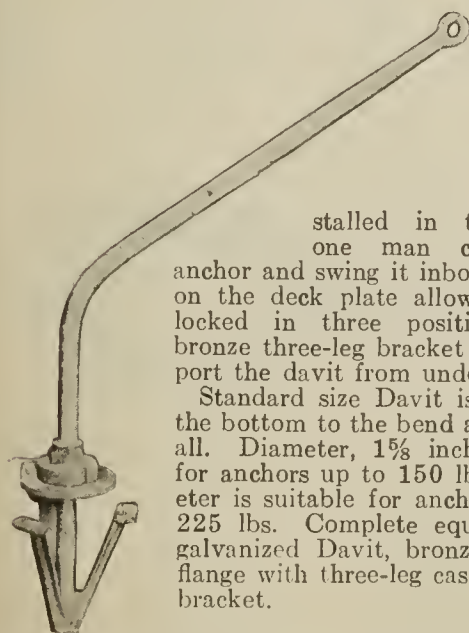
Boat and anchor davits made to order only. In ordering give the above dimensions marked with an X in the illustrations with diameter of davit, and state whether hollow or solid steel. State weight of boat or anchor to be raised.

If rail plate requires a brace, give distance from top of rail to deck, also distance from center of davit to foot of brace. We also furnish davits with a plain head and a hole to use a block with swivel jaws. All types are galvanized.

Prices on Application

UNIVERSAL ANCHOR DAVIT

CAST
BRONZE
BASE AND
BRACKET



With this type Davit installed in the bow of the boat one man can easily raise the anchor and swing it inboard. A small lever on the deck plate allows the davit to be locked in three positions. The heavy bronze three-leg bracket is supplied to support the davit from underneath the deck.

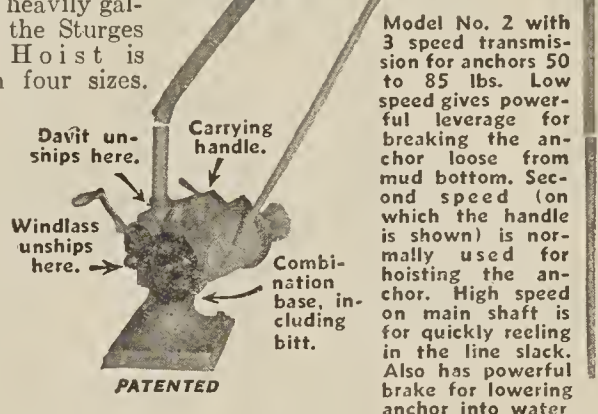
Standard size Davit is 22½ inches from the bottom to the bend and 50 inches overall. Diameter, 1½ inches and is suitable for anchors up to 150 lbs. 1¾ inch diameter is suitable for anchors weighing up to 225 lbs. Complete equipment consists of galvanized Davit, bronze deck socket and flange with three-leg cast bronze supporting bracket.

| | Each |
|--|---------|
| 1½ Inch Davit With Complete Equipment..... | \$55.00 |
| 1¾ Inch Davit With Complete Equipment..... | 60.80 |
| 1¾ Inch Less Supporting Bracket..... | 45.00 |
| 1¾ Inch Less Supporting Bracket..... | 50.00 |

ANCHOR HOISTS

Breaking and weighing the anchor are easy operations with the aid of the Sturges Anchor Hoist. Simple and durable in construction, easily installed and operated, the Sturges Anchor Hoist lifts the anchor clear of the bow, where swinging flukes cannot dig into the planking, and mud can be washed off before the anchor is brought inboard. For short stops, anchoring with the light service line is usually sufficient, without bothering to get out your heavy anchor line. Davit may be unshipped and windlass used separately for kedging off sand bar or for hauling out. Windlass may also be unshipped when not in use, leaving only combination base and mooring bitt on deck.

Substantially constructed, heavily galvanized, the Sturges Anchor Hoist is made in four sizes.



Model No. 2 with 3 speed transmission for anchors 50 to 85 lbs. Low speed gives powerful leverage for breaking the anchor loose from mud bottom. Second speed (on which the handle is shown) is normally used for hoisting the anchor. High speed on main shaft is for quickly reeling in the line slack. Also has powerful brake for lowering anchor into water

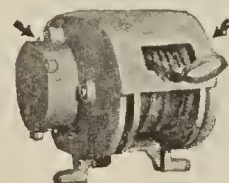
Special hoists for outboard motors and boats with capacities up to 450 pounds. Price on application.

| | Each |
|---|---------|
| No. 0—For Handling Anchors up to 40 Lbs..... | \$70.00 |
| No. 1—For Handling Anchors up to 50 Lbs..... | 90.00 |
| No. 2—For Handling Anchors up to 85 Lbs..... | 125.00 |
| No. 3—For Handling Anchors up to 125 Lbs..... | 200.00 |

(On the No. 0—The Davit does not unship from the windlass.)

A special bronze cable with a new type unwound bronze shackle for attaching to anchor, can be furnished as a permanent mooring line at a small additional charge.

DINGHY LINE CONTROLS



With this efficient device, fouling of the dinghy line around the propeller in reversing or manoeuvring is an impossibility. Slack in line is automatically taken up on a spring-operated drum and kept where it belongs—on deck instead of loose under the stern.

Complete with Bronze Towing Cable\$49.50

BACKING CHAIN

BRASS

For rudder duty; made of solid brass; will not corrode in fresh or salt water.



| Size, Inch | Per Foot | Size, Inch | Per Foot |
|------------|----------|------------|----------|
| 1/8 | \$0.83 | 5/16 | \$2.31 |
| 3/16 | 1.38 | 3/8 | 3.14 |
| 1/4 | 1.94 | .. | .... |

STRAIGHT LINK COIL CHAIN



ANCHOR AND MOORING

Made of high-grade open-hearth basic steel or iron; welded by experienced workmen; furnished natural color, as it comes from the forge, or blackened. Proof chain is a good merchantable chain for general use. BB chain is a closer link chain than proof grade and is tested. BBB or crane quality chain is made from refined steel or iron and is also a closer link chain than BB. This chain may be depended upon where strength and durability are required. It is tested and a certificate is furnished. Safe working load is about half the proof test. Average breaking strain is about double the proof test.

| PROOF | | | | | | |
|--------------|------------------------|------------------------|-----------------------|--------------------------|------------------|----------------|
| Size, Inches | Approx. Links, Per Ft. | Outside Length, Inches | Outside Width, Inches | Weight Per 100 Ft., Lbs. | Proof Test, Lbs. | Price per Foot |
| 3/8 | 13 | 1 3/8 | 7/8 | 46 | 1,000 | \$0.12 |
| 1/4 | 12 | 1 1/2 | 1 1/8 | 75 | 1,650 | .21 |
| 5/8 | 11 | 1 3/4 | 1 1/4 | 110 | 2,650 | .26 |
| 3/8 | 10 | 2 1/8 | 1 1/2 | 165 | 3,700 | .30 |
| 7/8 | 9 | 2 1/4 | 1 11/16 | 205 | 5,100 | .40 |
| 1/2 | 8 | 2 1/2 | 1 7/8 | 265 | 6,700 | .51 |
| 5/8 | 6 1/2 | 3 3/8 | 2 1/4 | 425 | 10,500 | .73 |
| 3/4 | 5 | 3 7/8 | 2 11/16 | 610 | 15,100 | .... |

Sizes 3/4 to 1 1/4, Prices upon Application

| BBB | | | | | | |
|--------------|------------------------|------------------------|-----------------------|--------------------------|------------------|-------------------------------|
| Size, Inches | Approx. Links, Per Ft. | Outside Length, Inches | Outside Width, Inches | Weight Per 100 Ft., Lbs. | Proof Test, Lbs. | Approx. Breaking Strain, Lbs. |
| 3/8 | 15 | 1 1/8 | 3/4 | 52 | 1,200 | 2,400 |
| 1/4 | 14 | 1 3/8 | 1 1/8 | 83 | 1,750 | 4,500 |
| 5/8 | 12 | 1 5/8 | 1 1/8 | 118 | 3,400 | 7,000 |
| 3/8 | 11 | 1 7/8 | 1 7/8 | 175 | 4,500 | 9,000 |
| 7/8 | 10 | 2 1/8 | 1 11/16 | 215 | 6,300 | 12,500 |
| 1/2 | 9 | 2 3/8 | 1 3/4 | 275 | 8,000 | 16,500 |
| 5/8 | 8 1/4 | 2 3/4 | 2 | 340 | 10,000 | 22,000 |
| 6/8 | 7 1/2 | 3 | 2 1/8 | 435 | 12,500 | 25,000 |
| 3/4 | 5 3/4 | 3 1/2 | 2 9/16 | 620 | 17,750 | 35,000 |

STEERING GEAR CHAINS



No. XXXX



No. AA



No. A

Used mainly on small power boats; very strong and so constructed that it conforms to the shape of the drum on steering wheel; furnished made of bronze or sheridized steel. Illustrations are actual size.

| Size Nos. | Size Link, Inches | Tensile Strength | | Per 100 Feet | |
|-----------|-------------------|------------------|-------|--------------|---------|
| | | Bronze | Steel | Sheridized | Bronze |
| XXXX | 1/2 x 1 1/8 | 1275 | 1200 | \$16.00 | \$25.35 |
| AA | 7/16 x 1 1/16 | 900 | 800 | 13.35 | 22.75 |
| A | 3/8 x 3/4 | 720 | 750 | 8.00 | 15.45 |
| 1 | 5/16 x 5/8 | 500 | 620 | 6.00 | 12.65 |

500 Feet on a Steel Reel

BRASS SAFETY CHAIN



No. 0



No. 00



No. 000

Illustrations Actual Size

| Size, Nos. | Per Dozen Yards | Size, Nos. | Per Dozen Yards | Size, Nos. | Per Dozen Yards |
|------------|-----------------|------------|-----------------|------------|-----------------|
| 000 | \$1.25 | 0 | \$1.80 | 2 | \$2.90 |
| 00 | 1.45 | 1 | 2.25 | 3 | 3.60 |

LOCK LINK PATTERN CHAIN



No. 4

High grade steel wire links; furnished in galvanized finish.

| Nos. | Gauge, Nos. | Tensile Strength, Lbs. | Weight per Hundred Feet, Lbs. | Per Hundred Feet, Galv. |
|------|-------------|------------------------|-------------------------------|-------------------------|
| 7 | 18 | 180 | 2 1/2 | \$5.30 |
| 6 | 17 | 205 | 3 | 5.40 |
| 5 | 16 | 320 | 4 1/4 | 5.60 |
| 4 | 15 | 405 | 6 | 5.70 |
| 3 | 14 | 495 | 7 | 5.80 |
| 2 | 13 | 560 | 10 | 6.20 |
| 1 | 12 | 940 | 13 | 7.20 |
| 1-0 | 11 | 1055 | 17 | 8.40 |
| 2-0 | 10 | 1545 | 21 | 9.60 |
| 3-0 | 9 | 1753 | 26 | 11.90 |
| 4-0 | 8 | 1915 | 31 | 14.30 |
| 5-0 | 7 | 2440 | 35 | 16.90 |
| 6-0 | 6 | 2940 | 41 | 20.40 |
| 7-0 | 5 | 3325 | 50 | 24.70 |

JACK CHAIN



No. 16

Single jack chain; plain brass. Twelve yards in a box.

| Brass, per Dozen Yards | | Brass, per Dozen Yard | |
|------------------------|--------|-----------------------|--------|
| Nos. | | Nos. | |
| 24 | \$0.50 | 14 | \$1.60 |
| 22 | .50 | 13 | 1.92 |
| 21 | .50 | 12 | 2.30 |
| 20 | .55 | 11 | 2.80 |
| 19 | .60 | 10 | 3.50 |
| 18 | .70 | 9 | 4.25 |
| 17 | .84 | 8 | 5.25 |
| 16 | 1.00 | 7 | 6.35 |
| 15 | 1.25 | 6 | 8.00 |

Galvanized on Application



CHAIN DISPLAY RACKS

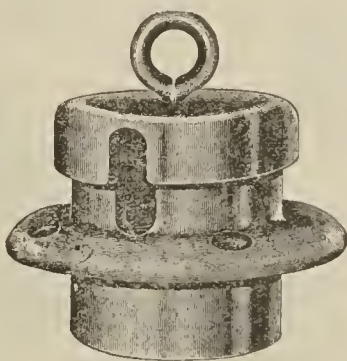
All steel sales and display rack. A most convenient storage rack containing eight spools of the most used small marine chain. Occupies a floor space of only 10x15 inches and is 48 inches high. Rack contains one spool each of the following chains:

Above rack complete with 8
Spools of chain.....\$76.00

| Feet Chain on Spool | No. of Chain | Description of Chain | Price per Foot |
|------------------------|-----------------|-----------------------------------|-------------------|
| 100 | 100 | Hot Galvanized Sash..... | \$0.07 |
| 100 | 100 | Bronze Sash..... | .12 |
| 75 | 250 | Bronze Sash..... | .15 |
| 200 | 250 | Hot Galvanized Sash..... | .10 |
| 125 | 1 | Hot Galvanized Lock Link..... | .06 |
| 75 | 2/0 | Hot Galvanized Coil Twisted Link | .15 |
| 75 | 2/0 | Hot Galvanized Coil Straight Link | .15 |
| 125 | 3/0 | Hot Galvanized Lock Link..... | .10 |

CHAIN DECK PIPES

Polished cast brass or galvanized cast iron; placed in the deck over the chain locker; pipe can be covered when chain is fast to the anchor; cover has hook on the inside and can be held in place by passing hook through one of the chain links. The ordering of sizes refer to inside diameter of pipes. In cutting decks, allowance must be made for thickness of pipe walls.



| Inside Diam., Inches | For Chain Diameter, Inches | Diam. of Flange, Inches | Weight Each, Lbs. | Galv., Each | Polished Brass, Each | Covers only, Galv., Each |
|----------------------------|----------------------------------|-------------------------------|-------------------------|----------------|----------------------------|-----------------------------------|
| 1 3/4 | 3/16 | 3 5/8 | 1 3/4 | \$1.45 | \$3.50 | \$1.10 |
| 2 | 1/4 | 4 1/4 | 2 3/4 | 1.55 | 4.50 | 1.35 |
| 2 1/2 | 3/8 | 4 3/4 | 4 1/4 | 2.50 | 6.50 | 1.80 |
| 3 | 1/2 | 5 1/16 | 6 | 2.90 | .... | 2.10 |
| 3 1/2 | 5/8 | 6 3/8 | 11 | 4.60 | .... | 2.50 |
| 4 | 3/4 | 7 1/8 | 18 1/8 | 5.70 | .... | 3.00 |

LAP LINKS

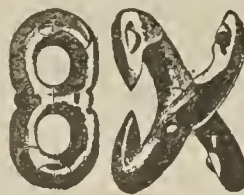


Made of wrought iron, with cleanly sheared ends; for repairing and fastening together two ends of chain.

Furnished regularly with galvanized finish.

| Size, Inches | Length Inside, Inches | Weight per Dozen, Lbs. | Per Dozen |
|-----------------|--------------------------|---------------------------|--------------|
| 1/8 | 2 | 1/2 | \$0.40 |
| 1/4 | 2 | 3/4 | .47 |
| 3/8 | 2 | 1 1/2 | .94 |
| 1/2 | 2 1/2 | 2 3/8 | 1.35 |
| 5/8 | 2 1/2 | 4 3/8 | 1.85 |
| 3/4 | 2 1/2 | 5 3/4 | 2.10 |
| 7/8 | 3 | 8 1/2 | 3.00 |
| 1 | 3 | 10 | 4.30 |

CONNECTING LINKS



KEYSTONE

Composed of two similar halves centrally pivoted on same axis; forged from bar steel; taking the place of a weld, shackle, snap hook or other loose metallic connection.

| Size, Inches | Length Over-All, Inches | Inside Dimensions of Opening, Inches | Weight per Dozen, Lbs. | Galvanized per Dozen |
|-----------------|-------------------------------|---|------------------------------|-------------------------|
| 1/4 | 1 7/8 | 3/8 x 1/2 | 3/4 | \$2.40 |
| 5/16 | 2 3/16 | 7/16 x 9/16 | 1 1/2 | 2.90 |
| 3/8 | 2 1/2 | 1/2 x 5/8 | 2 1/4 | 3.40 |
| 7/16 | 2 13/16 | 9/16 x 1 1/16 | 3 1/4 | 4.60 |
| 1/2 | 3 1/8 | 5/8 x 3/4 | 5 1/4 | 5.75 |
| 9/16 | 3 11/16 | 1 1/16 x 27/32 | 7 3/4 | 9.00 |
| 5/8 | 4 3/16 | 13/16 x 3 1/32 | 11 | 9.75 |
| 3/4 | 4 7/8 | 1 3/32 x 1 1/8 | 19 1/4 | 13.00 |
| 7/8 | 5 3/4 | 1 1/8 x 1 3/8 | 30 1/2 | 20.50 |
| 1 | 6 7/16 | 1 1/4 x 1 3/8 | 43 1/2 | 24.50 |

TIEBOUT'S "DUO"

Drop forged steel, with interlocking lugs; for connecting new or repairing broken chains; used by loggers, engineers, railroad men, etc.; also a substitute for shackles, etc.; galvanized furnished.



| Size, Inches | Outside Dimensions of Links, Inches | Weight per Dozen, Lbs. | Breaking Strain, Lbs. | Galvanized per Dozen |
|-----------------|--|------------------------------|-----------------------------|----------------------------|
| 3/16 | 1 3/16 x 3/4 | 3/8 | .... | \$1.50 |
| 1/4 | 1 1/2 x 1 | 3/4 | 5,580 | 1.50 |
| 5/16 | 1 11/16 x 1 3/16 | 1 | 8,300 | 1.65 |
| 3/8 | 2 1/16 x 1 3/8 | 2 | 11,200 | 2.00 |
| 7/16 | 2 3/8 x 1 1/2 | 3 1/8 | 13,980 | 2.40 |
| 1/2 | 2 5/8 x 1 3/4 | 4 1/2 | 15,900 | 2.90 |
| 9/16 | 3 x 1 15/16 | 6 5/8 | 19,200 | 3.90 |
| 5/8 | 3 5/16 x 2 3/16 | 9 | 23,900 | 4.50 |
| 3/4 | 3 7/8 x 2 1/2 | 14 1/4 | 34,100 | 6.00 |
| 7/8 | 4 1/2 x 2 15/16 | 20 1/4 | 38,600 | 9.25 |
| 1 | 5 x 3 1/4 | 29 | 59,900 | 14.00 |
| 1 1/4 | 6 1/8 x 4 | 53 1/2 | 103,100 | 21.50 |

Sizes 3/8 to 5/8 Inch, Twelve; 3/4 to 1 Inch, Six in a Box;
1 1/4 Inches Packed in Bulk

SHIP CLEATS



CAST IRON

For work boat use; heavy cast iron; in hot galvanized and black or self color finishes.

| Length, Inches | Size Base, Inches | Diam. Bolt Holes, Inch | Each | Black |
|-------------------|----------------------|------------------------------|--------|--------|
| 8 | 1 7/8 x 3 1/2 | 3/8 | \$0.60 | \$0.50 |
| 10 | 2 3/4 x 5 | 1/2 | 1.10 | .90 |
| 12 | 3 1/4 x 6 | 1/2 | 1.80 | 1.45 |
| 15 | 3 1/2 x 7 | 5/8 | 2.50 | 2.00 |
| 18 | 4 x 7 1/2 | 3/4 | 3.40 | 2.30 |
| 24 | 5 1/2 x 14 | 3/4 | 5.50 | 3.70 |
| 30 | 6 1/2 x 18 | 7/8 | 8.75 | 5.75 |
| 36 | 6 1/2 x 25 | 1 | 15.50 | 10.50 |

CLEATS



ROUND BASE

Cast brass; polished finish; for use with awnings, flag halyards, Venetian blinds, etc.; base drilled and countersunk for flat or oval head screws.

| Nos. | Length, Inches | Each |
|------|----------------|--------|
| 50 | 2 | \$0.40 |
| 51 | 2½ | .50 |

AWNING

In malleable iron, hot galvanized and cast brass; plain finish.



| Length, Nos. Inches | | Per 100 | | Length, Nos. Inches | | Per 100 | |
|---------------------|----|------------|------------|---------------------|----|------------|------------|
| | | Galvanized | Brass | | | Galvanized | Brass |
| 1 | 4¼ | \$4.00 | \$ on app. | 3 | 8 | \$8.00 | \$ on app. |
| 2 | 6 | 5.50 | | 4 | 10 | 20.00 | |



TRANSVERSE

Neat, light cleat with four holes for firm fastening.

In galvanized malleable iron and cast brass polished; for use with small boats.

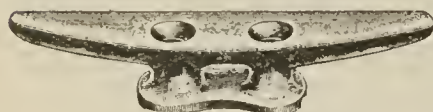
| Nos. | Length, Inches | Galvanized | Each | Brass |
|------|----------------|------------|------|--------|
| 1 | 4½ | \$0.33 | | \$0.95 |
| 2 | 5½ | .40 | | 1.05 |
| 3 | 6 | .45 | | 1.25 |
| 4 | 7 | .55 | | 1.70 |
| 5 | 8 | .65 | | 2.90 |

SQUARE BASE

Solid base cleat with four holes for firm fastening; in galvanized malleable iron and cast brass; polished finish.



| Size, Inches | Galvanized | Each | Brass |
|--------------|------------|------|--------|
| 2 | \$0.12 | | \$0.35 |
| 3 | .19 | | .60 |
| 4 | .43 | | .85 |
| 5 | .48 | | 1.15 |
| 6 | .70 | | 1.50 |



OPEN BASE

Can be fastened to a narrow place; furnished in malleable iron hot galvanized

or cast brass; polished finish; in two groups of sizes, 3½ to 8 inches, regular, for small boats, and 10 to 18 inches heavy cast iron, for yachts and work boats; all sizes have two bolt holes.

Regular

| Size, Inches | Each | Cast Brass |
|--------------|-----------------------|------------|
| | Mall. Iron Galvanized | |
| 3½ | \$0.15 | \$0.50 |
| 4 | .20 | .60 |
| 5 | .25 | .70 |
| 6 | .30 | .90 |
| 8 | .50 | 1.35 |

HEAVY

| Size, Inches | Each | Cast Brass |
|--------------|----------------------|------------|
| | Cast Iron Galvanized | |
| 10 | \$0.80 | \$2.50 |
| 12 | 1.00 | 3.00 |
| 14 | 1.50 | 5.00 |
| 18 | 2.75 | .... |
| .. | | |



HOLLOW

Cast brass; polished natural brass finish. Being hollow, weight is kept down yet cleat body is larger in proportion.

| Length, Inches | Each | Length, Inches | Each |
|----------------|--------|----------------|--------|
| 4½ | \$1.10 | 10 | \$3.00 |
| 5½ | 1.20 | 12 | 4.25 |
| 6½ | 1.30 | .... | .... |
| 8 | 1.75 | .... | .... |

CLEATS

RACING
"Osborne"

Cast brass; in polished finish. Gives instantaneous release of sheets.

| Length, Inches | Pol. Brass Each |
|----------------|-----------------|
| 4 | \$1.60 |
| 6 | 2.00 |

JAM
WITH BASE

For racing boats and sailing canoes; cast brass; polished natural finish; fastened with screws or bolts.



| Length, Inches | Each |
|----------------|--------|
| 3 | \$0.60 |
| 4 | .80 |
| 5 | 1.20 |



STREAM LINE

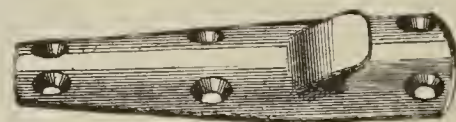
Used on fast runabouts; the streamline design of this cleat brings it close to the deck. Made of polished cast brass or nickel silver.

| Nos. | Size, Length, Inches | Weight Each, Ozs. | Polished Brass Each | Nickel Silver, Each |
|------|----------------------|-------------------|---------------------|---------------------|
| 1925 | 2½ | 3 | \$0.60 | \$0.65 |
| 1926 | 4 | 7 | 1.30 | 1.40 |
| 1927 | 6 | 12 | 1.60 | 1.75 |
| 1928 | 8 | 22 | 2.50 | 2.70 |

SHOULDER CLEATS

Used on hollow or light solid masts where a withe or screw eye is not desirable; concaved.

Furnished in cast brass plain and polished finish and cast iron, hot galvanized.



| Nos. | Spar Diameter, Inches | Plain Brass, Each |
|------|-----------------------|-------------------|
| 1 | 2½ | \$0.40 |
| 2 | 3 | .45 |
| 3 | 4 | .55 |
| 4 | 5 | .65 |
| 5 | 6 | .80 |

DAVIT CLEATS

CAST IRON

Used to make fast the falls on boats davits; concave base fits the davit and is seized to it with wire or marline; hot galvanized finish.



| Length, Inches | For Davit, Diam., Inches | Each |
|----------------|--------------------------|--------|
| 12 | 2 | \$2.80 |
| 12 | 2¼ | 3.10 |
| 13 | 2½ | 4.00 |
| 14½ | 2¾ | 4.00 |
| 14½ | 3 | 4.75 |
| 14½ | 3½ | 5.20 |
| 14½ | 4 | 5.50 |

Wherever possible throughout this catalog, a date appears on standard lists or on lists of extras, a detail that differentiates this catalog from the usual run of "printed matter."

STREAMLINE FITTINGS

STREAMLINE CLEAT
CAST BRONZE AND NICKEL SILVER

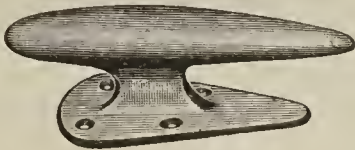


Fig. 114

| Length Overall, Inches | Size Base, Inches | For Rope Diameter, Inches |
|------------------------------|-------------------------|---------------------------------|
| 2½ | 1 x 2 | Up to ½ |
| 3½ | 1¼ x 2¾ | Up to ⅝ |
| 4½ | 1½ x 3¼ | Up to ¾ |
| 5½ | 1⅞ x 4 | Up to 1 |

PRICE EACH

| Length, Inches | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
|-------------------|--------------------|------------------|------------------|--------------------|
| 2½ | \$0.70 | \$0.95 | \$0.95 | \$1.40 |
| 3½ | .90 | 1.15 | 1.15 | 1.80 |
| 4½ | 1.25 | 1.50 | 1.50 | 2.20 |
| 5½ | 1.65 | 1.90 | 1.90 | 3.00 |

STREAMLINE BOW CHOCKS
CAST BRONZE AND NICKEL SILVER
OPEN PATTERN

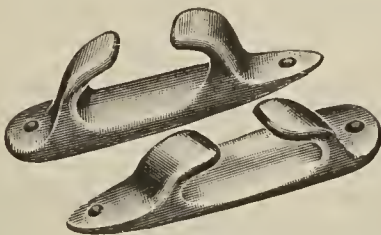


Fig. 115

| Length Overall, Inches | Width Base, Inches | For Rope Diameter, Inches |
|------------------------------|--------------------------|---------------------------------|
| 3½ | ¾ | Up to ½ |
| 4½ | 1 | Up to ⅝ |
| 5½ | 1⅛ | Up to ¾ |
| 6½ | 1⅜ | Up to 1 |

PRICE PER PAIR

| Length, Inches | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
|-------------------|--------------------|------------------|------------------|--------------------|
| 3½ | \$1.30 | \$1.60 | \$1.60 | \$2.40 |
| 4½ | 1.50 | 1.80 | 1.80 | 3.00 |
| 5½ | 2.20 | 2.50 | 2.50 | 4.00 |
| 6½ | 2.80 | 3.10 | 3.10 | 5.00 |

STREAMLINE STERN CHOCKS
CAST BRONZE AND NICKEL SILVER
OPEN PATTERN



Fig. 116

| Length Overall, Inches | Width Base, Inches | For Rope Diameter, Inches |
|------------------------------|--------------------------|---------------------------------|
| 3 | ¾ | Up to ½ |
| 4 | 1 | Up to ⅝ |
| 5 | 1⅛ | Up to ¾ |
| 6 | 1⅜ | Up to 1⅛ |

PRICE EACH

| Length, Inches | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
|-------------------|--------------------|------------------|------------------|--------------------|
| 3 | \$0.65 | \$0.85 | \$0.85 | \$1.30 |
| 4 | .75 | .95 | .95 | 1.50 |
| 5 | 1.10 | 1.30 | 1.30 | 2.00 |
| 6 | 1.40 | 1.80 | 1.80 | 2.50 |

STREAMLINE STERN CHOCKS
CLOSED PATTERN



Fig. 118

| Length Overall, Inches | Width Base, Inches | For Rope Diameter, Inches |
|------------------------------|--------------------------|---------------------------------|
| 3 | ¾ | Up to ⅝ |
| 4 | 1 | Up to ¾ |
| 5 | 1⅛ | Up to 1 |
| 6 | 1⅜ | Up to 1⅛ |

PRICE EACH

| Length, Inches | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
|-------------------|--------------------|------------------|------------------|--------------------|
| 3 | \$0.75 | \$1.00 | \$1.00 | \$1.70 |
| 4 | 1.00 | 1.25 | 1.25 | 2.00 |
| 5 | 1.40 | 1.65 | 1.65 | 2.50 |
| 6 | 1.75 | 2.15 | 2.15 | 3.25 |

STREAMLINE BOW CHOCKS

CLOSED PATTERN

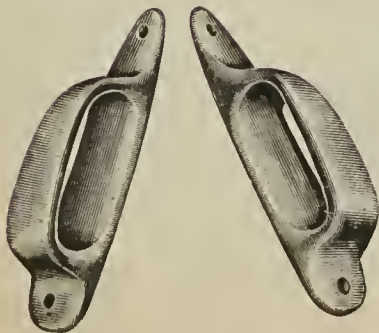


Fig. 117

| Length Overall, Inches | Width Base, Inches | For Rope Diameter, Inches |
|------------------------------|--------------------------|---------------------------------|
| 3½ | ¾ | Up to ⅝ |
| 4½ | 1 | Up to ¾ |
| 5½ | 1⅛ | Up to 1 |
| 6½ | 1⅜ | Up to 1⅛ |

PRICE PER PAIR

| Length, Inches | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
|-------------------|--------------------|------------------|------------------|--------------------|
| 3½ | \$1.50 | \$1.90 | \$1.90 | \$3.00 |
| 4½ | 2.00 | 2.40 | 2.40 | 4.00 |
| 5½ | 2.80 | 3.30 | 3.30 | 5.00 |
| 6½ | 3.50 | 4.00 | 4.00 | 6.50 |

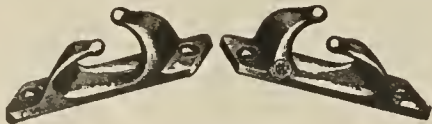
BOW CHOCKS



Style 6073

Standard style of chock for use where lines do not lead at right angles to the boat's rail.
Cast brass, polished finish and cast malleable iron; hot galvanized.

| Length, Inches | For Diameter Rope, Inches | Width, Inches | Per Pair | |
|-------------------|------------------------------|------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 3 | 3/8 | 5/8 | \$0.35 | \$1.30 |
| 4 | 1/2 | 3/4 | .40 | 1.50 |
| 5 | 3/4 | 7/8 | .50 | 2.00 |
| 6 | 7/8 | 1 1/8 | 1.00 | 2.50 |
| 8 | 1 | 1 3/16 | 1.60 | 4.00 |
| 10 | 1 1/4 | 1 1/4 | 2.40 | 6.50 |



SKENE

Designed to prevent rope jumping out of chock while in use.
Cast brass, polished finish.

| Nos. | Length, Inches | For Diameter Rope, Inches | Polished Brass per Pair |
|------|-------------------|------------------------------|----------------------------|
| 1 | 4 1/2 | 1/2 | \$2.00 |
| 2 | 5 1/2 | 3/4 | 3.00 |
| 3 | 7 3/4 | 1 | 5.00 |
| 4 | 8 1/2 | 1 1/4 | 7.00 |
| 5 | 10 1/2 | 1 1/2 | 10.50 |

Note—The length of chock is measured in the center of the plate.

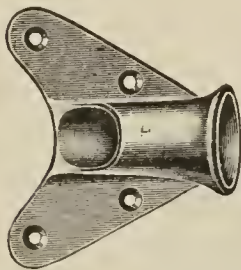


Fig. 543

COMBINATION BOW PLATE

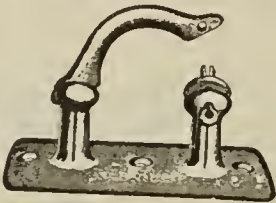
Cast bronze polished finish.
A bow plate and bow chock combined.
Small size for outboard motor boats. Large size for runabouts.

| Size, Nos. | Length, Inches | Width, Inches | Diam. Rope | Each | |
|---------------|-------------------|------------------|--------------|--------|------------------|
| | | | | Bronze | Nickel Plated |
| 1 | 3 1/4 | 4 1/4 | Up to 5/8 | \$2.50 | \$2.75 |
| 2 | 3 3/4 | 4 3/4 | Up to 1 Inch | 2.75 | 3.00 |

COMBINATION CHOCKS

No. 418

Cast brass; polished finish with cotter pin fastening; guard prevents rope from jumping the chock; also used as a mooring bitt.



| Size, Nos. | Length, Inches | Opening, Inches | Each |
|---------------|-------------------|--------------------|--------|
| 1 | 4 3/4 | 1 5/8 | \$2.25 |
| 2 | 6 | 2 1/4 | 3.75 |

STERN CHOCKS



STRAIGHT
Style 6059

Cast malleable iron; hot galvanized finish and cast brass; polished natural brass finish.

| Length, Inches | Width, Inches | For Rope, Inches | Each | |
|-------------------|------------------|---------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 4 | 1 5/16 | 1/2 | \$0.18 | \$0.75 |
| 5 | 1 | 5/8 | .30 | 1.00 |
| 6 | 1 1/4 | 3/4 | .43 | 1.25 |
| 8 | 1 1/2 | 1 | 1.10 | 2.00 |
| 10 | 1 3/4 | 1 1/4 | 1.30 | 3.50 |
| 12 | 2 5/8 | 1 1/2 | 2.25 | .... |
| 15 | 3 3/8 | 1 3/4 | 4.25 | .... |
| 18 | 3 3/8 | 2 | 7.10 | .... |



SKENE

Ideal when towing a tender. Rope cannot jump out of the chock, yet is easily removed at will.
Cast brass; polished natural brass finish.

| Nos. | Length, Inches | Opening, Inches | Polished Brass Each |
|------|-------------------|--------------------|------------------------|
| 11 | 4 | 5/8 | \$0.90 |
| 12 | 5 1/2 | 1 | 1.50 |
| 13 | 7 | 1 1/2 | 3.00 |
| 14 | 9 | 2 | 6.50 |

STRAIGHT CHOCKS

CLOSED

Style 6079

Cast malleable iron; hot galvanized finish and cast brass; polished natural brass finish.



| Length, Inches | Opening, Inches | Each | |
|-------------------|--------------------|------------|------------|
| | | Galvanized | Pol. Brass |
| 4 | 1 1/2 x 5/8 | \$0.22 | \$1.00 |
| 6 | 2 1/2 x 1 | .55 | 1.60 |
| 8 | 3 3/8 x 1 1/4 | 1.35 | 2.25 |
| 10 | 4 1/2 x 1 3/4 | 1.60 | 3.75 |
| 12 | 5 1/4 x 2 | 2.30 | .... |
| 15 | 5 3/4 x 2 1/2 | 4.10 | .... |
| 18 | 8 x 3 | 6.50 | .... |
| 20 | ..... | ..... | ..... |
| 22 | ..... | ..... | ..... |
| 24 | ..... | ..... | ..... |

Sizes 20 to 24 Inches, Prices Upon Application

ROLLER CHOCKS



Wrought iron; hot galvanized finish cast roller. Boats having bowsprit ride to anchor easier if the chain is carried over this type of chock fastened to side of bowsprit.

| Nos. | Length, Inches | Size of Sheave, Inches | | Galvanized Each |
|------|-------------------|------------------------|-----------|--------------------|
| | | Diameter | Thickness | |
| 1 | 9 | 1 7/8 | 7/8 | \$2.90 |
| 2 | 9 | 2 | 1 1/8 | 3.30 |
| 3 | 10 | 2 | 1 1/4 | 3.70 |
| 4 | 10 | 2 | 1 1/2 | 4.30 |
| 5 | 12 | 2 1/4 | 1 3/4 | 4.90 |

BULWARK BOW CHOCKS

POLISHED CAST BRASS

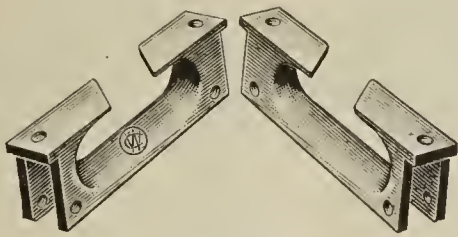


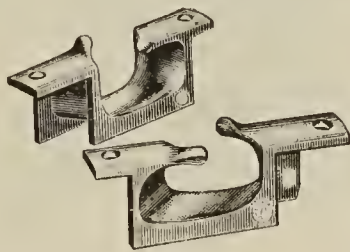
Fig. 4128

| Lgth., Inc. | For Diam. Rope, up to Inches | Thick- ness of Rail, Inches | Hgt., Inches | Wgt. per Pair, Lbs. | Pol. Brass | Pol. Nickel Silver | Chrom. Plated |
|----------------|--|--------------------------------------|-----------------|------------------------------|---------------|--------------------------|------------------|
| 11 1/4 | 2 | 1 3/4 | 3 | 9 | \$12.00 | \$13.50 | \$17.00 |

Drilled for 1/8 in. Bolt

No. 4122—SKENE

Cable can not accidentally jump out, when riding to anchor or to a mooring in a choppy sea or when tied up to a dock. Prevents chafing and wear on cable. Polished cast brass.



| For Thickness Rail, Inches | For Rope, Inches | Height, Inches | Length, Inches | Weight per Pair, Lbs. | Per Pair |
|-------------------------------|---------------------|-------------------|-------------------|--------------------------|-------------|
| 1 1/4 | 1 1/4 | 2 1/8 | 6 | 3 | \$5.00 |
| 1 1/2 | 1 1/2 | 2 1/2 | 7 | 4 5/16 | 7.25 |

STREAMLINE MOORING BITTS

POLISHED CAST BRONZE

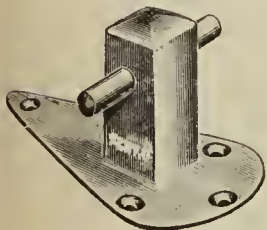


Fig. 354

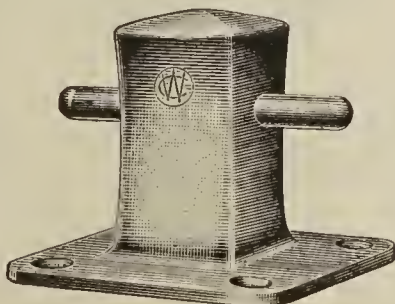
| Length Base, Inches | Width Base, Inches | Height Overall, Inches | Weight, Ounces | Polished Bronze Each |
|-------------------------------------|--------------------------|------------------------------|-------------------|----------------------------|
| 3 3/4 | 2 1/4 | 2 1/8 | 8 | \$1.75 |
| Nickel Plated or Nickel Silver..... | | | | 2.00 |

A very fine looking and practical mooring bitt for the better class of outboard motor boats and runabouts. Streamlined base gives it a racy appearance and matches other streamline fittings.

MOORING BITTS

IMPROVED

Ornamental and most practical; hold under exceptional strain. Beveled edges prevent cable from chafing. Drilled and countersunk for bolts. Should be bolted to deck frame. Polished cast brass.



| Nos. | Size Base, Inches | Height, Inches | Drilled for Bolts, Inch | Weight Each, Lbs. | Each |
|------|----------------------|-------------------|----------------------------|----------------------|--------|
| 0 | 3 x3 | 2 1/2 | 3/16 | 3/4 | \$2.00 |
| 1 | 4 1/4 x4 1/4 | 3 1/2 | 1/4 | 2 1/8 | 3.50 |
| 2 | 6 x6 | 5 | 5/16 | 5 5/8 | 6.75 |
| 3 | 7 x7 | 6 1/2 | 3/8 | 11 | 12.75 |

MOORING BITTS

WITH FLAGSTAFF SOCKET



Cast bronze; polished finish; used on small runabouts and tenders; socket is straight for bow flagstaff.

Each

No. 709S—Height, 2 1/2 Inches; Size of Base, 3x3 Inches; Weight Each, 3/4 Lbs. \$2.50

RIDING BITTS

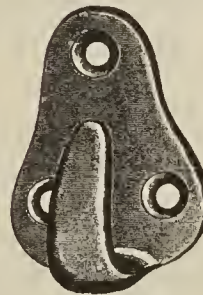
IMPROVED

Cast iron; hot galvanized finish
Used forward on boats too small to require a windlass; convenient for belaying anchor cables or shore lines.



| Nos. | Height, Inches | Length Arms, Inches | Size Base, Inches | Each |
|-------|-------------------|------------------------|----------------------|--------|
| 1 | 7 | 6 1/2 | 4 1/2 x6 | \$3.70 |
| 1 1/2 | 8 1/2 | 8 | 5 x6 | 6.75 |
| 2 | 10 | 10 | 5 1/2 x8 1/2 | 9.25 |

FENDER HOOKS



A neat, strong fitting from which fenders can be hung. Made of solid brass with holes for countersunk wood screws. Polished brass.

Each

Size Base, 2x1 3/8 Inches; Weight
Each, 2 1/2 Ounces \$0.40
Polished Nickel Silver..... .50

LIFTING RING WITH BASE

POLISHED CAST BRONZE

The latest design lifting ring with a base for fastening to keel of boat—Cleat and base tapped for 5/8-inch rod—Small size for outboards. Large for runabouts.



Fig. 446

| Nos. | Height Overall, Inches | Diam. Eye, Inches | Size of Base, Inches | Per Set |
|------|------------------------------|-------------------------|----------------------------|------------|
| 1 | 3 | 1 1/8 | 3 x 1 3/8 | \$2.45 |
| 2 | 4 1/8 | 2 | 3 x 1 3/8 | 3.35 |

CABLES

Hemp is laid up right-handed into yarns. Yarns are laid up left-handed into strands. Three strands laid up right-handed make a hawser. Three hawsers laid up left-handed make a cable. Shroud-laid rope has a core surrounded by four strands.

BOAT HOOKS

NAVY—BALL POINT
SINGLE HOOK
Style 6579

Made of cast malleable iron; hot galvanized finish and in cast brass, polished finish.

| Nos. | For Diameter Pole, Inches | Length, Inches | Each— | |
|------|---------------------------|----------------|------------|--------|
| | | | Galvanized | Brass |
| 3½ | 1 | 3⅞ | \$0.50 | \$1.15 |
| 4 | 1¼ | 8 | .55 | 1.30 |
| 5 | 1½ | 9⅜ | .70 | 1.75 |

NAVY—BALL POINT
DOUBLE HOOK
Style 6581

Cast brass; polished finish and cast malleable iron; hot galvanized finish.



| Nos. | For Diameter Pole, Inches | Length, Inches | Each— | |
|------|---------------------------|----------------|------------|--------|
| | | | Galvanized | Brass |
| 6½ | 1 | 7½ | \$0.55 | \$1.20 |
| 7 | 1¼ | 8¼ | .60 | 1.35 |
| 8 | 1½ | 9⅜ | .90 | 1.80 |

SHARP POINT—SINGLE HOOK

Style 6587



Cast brass; polished finish and cast malleable iron; hot galvanized finish.

| Nos. | For Diameter Pole, Inches | Length, Inches | Each— | |
|------|---------------------------|----------------|------------|--------|
| | | | Galvanized | Brass |
| 0 | 1 | 7¼ | \$0.45 | \$1.15 |
| 1 | 1¼ | 8¼ | .55 | 1.30 |
| 2 | 1½ | 9⅜ | .70 | 1.75 |
| 3 | 2 | 9¾ | .85 | 2.50 |

BOAT HOOKS AND POLES



ASH

Made of selected straight grain ash, turned and plain finish; can be furnished painted or varnished at an additional cost of \$.03 per foot; hook is of malleable iron; hot galvanized finish or polished cast brass.

| Length, Feet | Each— | | Length, Feet | Each— | |
|--------------|---------|------------|--------------|---------|------------|
| | Brass | Galvanized | | Brass | Galvanized |
| 4 | \$..... | \$..... | 10 | \$..... | \$..... |
| 4½ | | | 12 | ..... | ..... |
| 5 | | | 14 | ..... | ..... |
| 5½ | | | 16 | ..... | ..... |
| 6 | | | 18 | ..... | ..... |
| 7 | | | 20 | ..... | ..... |
| 8 | | | 22 | ..... | ..... |
| 9 | | | .. | | |

Note—Poles only can be furnished, 6 to 20 feet.

Prices Upon Application

WIRE ROPE PULLEYS

UPRIGHT
Style 6497

Malleable iron; hot galvanized finish. Used for tiller and control lines on all types of boats. Furnished in single and double wheel types.

Single

| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Each— | |
|------|------------------------|---------------------|------------|-------------|
| | | | Galvanized | Plain Brass |
| 10 | ⅜ | ⅜x2½ | \$0.50 | \$1.00 |
| 20 | ¼ | ½x3¼ | .80 | 1.50 |
| 30 | ⅝ and ⅜ | ¾x4½ | 1.50 | 2.50 |

Double

| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Each— | |
|------|------------------------|---------------------|------------|-------------|
| | | | Galvanized | Plain Brass |
| 110 | ⅜ | ⅜x2½ | 1.00 | 1.50 |
| 120 | ¼ | ½x3¼ | 1.60 | 2.25 |
| 30 | ⅝ and ⅜ | ¾x4½ | 2.50 | 3.50 |

WIRE ROPE PULLEYS

SIDE
Style 6499

Cast brass; plain finish and malleable iron hot galvanized finish. Used for tiller and control lines, etc. Furnished in single and double types.

| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Single, Each— | | Double, Each— | |
|------|------------------------|---------------------|---------------|-------------|---------------|-------------|
| | | | Galv. | Plain Brass | Galv. | Plain Brass |
| 1 | 11 | ⅜x2½ | \$0.50 | \$1.00 | \$1.00 | \$1.50 |
| 2 | 12 | ½x3¼ | .80 | 1.50 | 1.60 | 2.25 |
| 3 | 13 ⅝ and ⅜ | ¾x4½ | 1.50 | 2.50 | 2.50 | 3.50 |

DECK BLOCKS

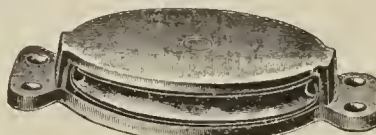
WIRE ROPE
Style 6495

Cast brass; polished finish and cast malleable iron; hot galvanized finish. Used for tiller lines, halyards, centerboards, etc.



| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Galvanized | Each— | |
|------|------------------------|---------------------|------------|-------------|----------------|
| | | | | Plain Brass | Polished Brass |
| 1 | ¼ and ⅝ | 1 ⅞x7/16 | \$0.60 | \$1.00 | \$1.75 |
| 2 | ⅜ | 3 x 7/16 | 1.10 | 2.00 | 2.75 |
| 3 | 7/16 | 4 x 5/8 | 2.00 | 3.75 | 5.00 |
| 3½ | 1/2 | 4 1/2 x 7/8 | 3.00 | ..... | ..... |
| 4 | 5/8 | 5 x 7/8 | 3.50 | ..... | ..... |
| 5 | ¾ | 6 x 1 | 5.25 | ..... | ..... |

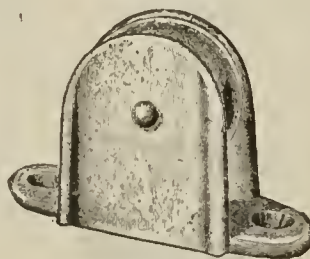
CHEEK BLOCKS

WIRE ROPE
Style 6493

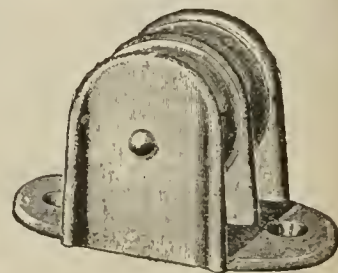
Cast iron; hot galvanized finish or cast brass; polished finish. Used for tiller lines, control lines, fastened to booms, for use with lazy jacks, etc.

| Nos. | Diameter of Ropes, Inches | Size Sheave, Inches | Galvanized | Each— | |
|------|---------------------------|---------------------|------------|-------------|----------------|
| | | | | Plain Brass | Polished Brass |
| 1 | ¼ and ⅝ | 1 ⅞x7/16 | \$0.50 | \$1.00 | \$1.75 |
| 2 | ⅜ | 3 x 7/16 | .70 | 2.00 | 2.75 |
| 3 | 7/16 | 4 x 5/8 | 1.10 | 3.75 | 5.00 |
| 3½ | 1/2 | 4 1/2 x 7/8 | 1.90 | ..... | ..... |
| 4 | 5/8 | 5 x 7/8 | 2.40 | ..... | ..... |
| 5 | ¾ | 6 x 1 | 4.00 | ..... | ..... |

DECK HALYARD BLOCKS



Single



Double

For halyards of sail boats; also can be used with tiller and control lines; furnished in cast iron; hot galvanized finish; single and double.

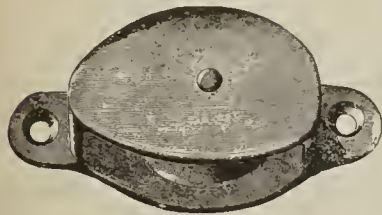
Single

| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | —Each— | |
|--------|---------------------------|-----------------------------------|--------|-------------------|
| | | | Galv. | Polished Brass |
| 0 | $\frac{5}{16}$ | $1\frac{1}{4} \times \frac{3}{8}$ | .20 | \$0.90 |
| 1 | $\frac{3}{8}$ | $1\frac{1}{2} \times \frac{1}{2}$ | .28 | 1.00 |
| 3 | $\frac{1}{2}$ | $2 \times \frac{5}{8}$ | .40 | 1.75 |
| 5 | $\frac{5}{8}$ | $2\frac{1}{2} \times \frac{3}{4}$ | .75 | 2.75 |
| 7 | $\frac{3}{4}$ | $3 \times \frac{7}{8}$ | 1.35 | 4.00 |
| Double | | | | |
| 2 | $\frac{3}{8}$ | $1\frac{1}{2} \times \frac{1}{2}$ | .48 | 1.25 |
| 4 | $\frac{1}{2}$ | $2 \times \frac{5}{8}$ | .80 | 2.50 |
| 8 | $\frac{3}{4}$ | $3 \times \frac{7}{8}$ | 2.00 | ..... |

CHEEK HALYARD BLOCKS

SINGLE

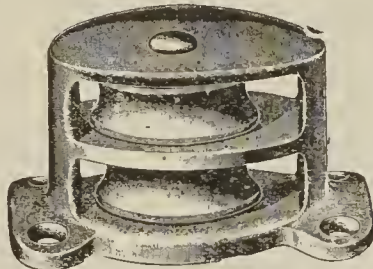
Malleable iron; hot galvanized finish and cast brass; polished natural finish; for use with halyards, tiller and control lines, etc.



| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Each— | |
|------|------------------------|---------------------|------------|--------|
| | | | Galvanized | Brass |
| 0 | 1/4 | 1 1/2 x 7/16 | \$0.30 | \$0.75 |
| 1 | 5/16 | 1 1/4 x 7/16 | .35 | .90 |
| 2 | 3/8 | 1 1/2 x 1/2 | .45 | 1.25 |
| 3 | 1/2 | 2 x 5/8 | .80 | 1.75 |
| 4 | 5/8 | 2 1/2 x 3/4 | 1.00 | .... |
| 5 | 3/4 | 3 x 7/8 | 1.25 | .... |
| 6 | 7/8 | 3 1/2 x 1 | 1.50 | .... |

DOUBLE

Cast brass; polished finish and cast malleable iron; hot galvanized finish.



| Nos. | Diam. of Rope, Inch | Size Sheaves, Inches | Each— | |
|------|---------------------|----------------------|------------|--------|
| | | | Galv. Pol. | Brass |
| 11 | 5/16 | 1 1/4 x 7/16 | \$0.60 | \$1.50 |
| 12 | 3/8 | 1 1/2 x 1/2 | .90 | 1.90 |
| 13 | 1/2 | 2 x 5/8 | 1.25 | 3.00 |

SIDE PULLEYS

Style 6483

Cast iron, hot galvanized and cast brass, polished finish.



| Nos. | Score, Inch | Size Sheave, Inches | Each— | |
|------|-------------|---------------------|------------|--------|
| | | | Galvanized | Brass |
| 1 | 1/4 | 3/4 x 3/8 | \$0.25 | \$0.50 |
| 2 | 5/16 | 1 3/16 x 7/16 | .35 | .60 |
| 3 | 3/8 | 1 1/2 x 1 | .45 | .75 |

STEERING ROPE BLOCKS

ON PLATES

Cast malleable iron; hot galvanized. Used as tiller, steering and control line guides; also used with jib sheets.



| Nos. | For Diameter of Rope, Inch | Type Eye | Each— | |
|------|----------------------------|----------|------------|--------|
| | | | Galvanized | Brass |
| 3 | 1/4 | Swivel | \$0.48 | \$1.50 |
| 5 | 5/16 | Swivel | .55 | 1.75 |
| 7 | 3/8 | Swivel | .85 | 2.00 |
| 9 | 7/16 | Stiff | 1.10 | .... |

CENTERBOARD BLOCKS

COMMON SHEAVE

Malleable iron; hot galvanized finish. Used with centerboards on sailboats; can also be used with tiller and control lines as a guide around corners.



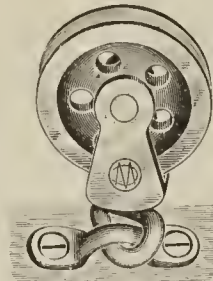
| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Each— | |
|------|------------------------|---------------------|------------|--------|
| | | | Galvanized | Brass |
| 1 | 3/8 | 1 1/2 x 1 1/2 | \$0.75 | \$1.75 |
| 2 | 1/2 | 5/8 x 2 | 1.50 | 3.00 |

"Locks and Latches for Doors and Hatches"

STEERING ROPE BLOCKS

SWIVEL

Swivels in any direction; has a large diameter sheave with heavy pin; assures easy steering and saves cable through elimination of sharp bends. Base is narrow to fit gunwales but fastening holes are widely spaced for strength. Polished or plain brass; size of sheave, 1 7/8 x 7/8 inches; size of base, 1/2 x 2 inches; length over all, 3 1/4 inches.



No. 5781—Weight Each, 6 Ounces; Plain Brass... \$0.85

STEERING GEAR LEADERS

Style 6435

Wrought iron staples with cast malleable iron split eyes; hot galvanized finish. For use on steamboats.



No. 5240—Length, 4 1/2 Inches; Width, 2 3/8 Inches; Inside Diameter of Eye, 3/4 Inch; Height from Base of Eye, 2 1/4 Inches \$0.60

Note—Longer staples furnished to order. Prices upon application.

EYES ON PLATES

Cast brass; polished natural finish and cast malleable iron hot galvanized finish. For use as tiller and control line guides; also used as hand rail brackets for cabin tops of sail boats, etc.



| Nos. | Diameter of Rope, Inch | Size of Plate, Inches | Each— | |
|------|------------------------|-----------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 0 | 3/8 | 1 5/16 x 1 1/2 | \$0.08 | \$0.25 |
| 1 | 1/2 | 1 1/4 x 1 3/4 | .10 | .30 |
| 2 | 5/8 | 1 1/4 x 1 7/8 | .12 | .35 |

FAIR LEADERS

ON PLATES

Cast brass; polished natural finish and cast malleable iron, hot galvanized finish.

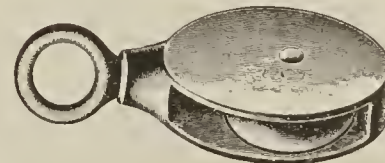
| Nos. | Diameter of Base, Inches | Size of Rope Dia., In | Each— | |
|------|--------------------------|-----------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 1 | 1 1/4 | 1/4 | \$0.15 | \$0.55 |
| 2 | 1 5/8 | 5/16 | .25 | .65 |
| 3 | 1 5/8 | 3/8 | .35 | .80 |



SWIVEL EYE BLOCKS

SINGLE

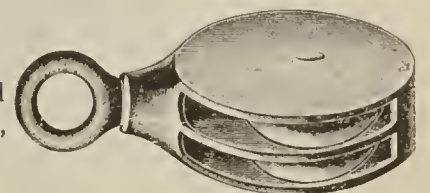
Cast malleable iron; hot galvanized finish and cast brass; polished natural finish.



| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Each— | |
|------|------------------------|---------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 0 | 3/16 | 9/16 x 5/16 | \$0.10 | \$0.65 |
| 1 | 3/16 | 3/4 x 5/16 | .12 | .75 |
| 3 | 1/4 | 1 x 1 1/32 | .18 | .85 |
| 5 | 5/16 | 1 3/8 x 7/16 | .30 | 1.00 |
| 7 | 3/8 | 1 1/2 x 1/2 | .50 | 1.20 |

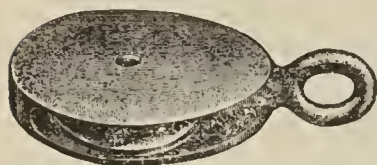
DOUBLE

Cast brass, polished finish or malleable iron, hot galvanized finish.



| Nos. | Diameter of Rope, Inch | Size Sheave, Inches | Each— | |
|------|------------------------|---------------------|------------|------------|
| | | | Galvanized | Pol. Brass |
| 2/0 | 3/16 | 9/16 x 5/16 | \$0.16 | \$0.75 |
| 2 | 3/16 | 3/4 x 5/16 | .20 | .95 |
| 4 | 1/4 | 1 x 1 1/32 | .30 | 1.25 |
| 6 | 5/16 | 1 3/8 x 7/16 | .50 | 1.75 |
| 8 | 3/8 | 1 1/2 x 1/2 | .70 | .... |

TACKLE BLOCKS



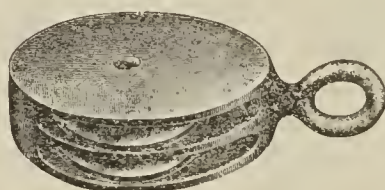
SINGLE

Malleable iron; hot galvanized finish; and cast brass; polished.

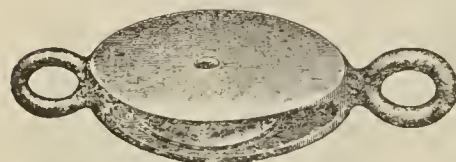
| Nos. | Length Shell, Inches | Diameter of Rope, Inch | Size Sheave, Inches | Each | |
|------|-------------------------|---------------------------|------------------------|------------|--------|
| | | | | Galvanized | Brass |
| 1 | 1 1/4 | 3/16 | 3/4 x 1/4 | \$0.10 | \$0.45 |
| 3 | 1 5/8 | 1/4 | 1 x 5/16 | .13 | .55 |
| 5 | 2 | 5/16 | 1 3/8 x 7/16 | .21 | .75 |
| 7 | 2 1/4 | 3/8 | 1 1/2 x 1/2 | .28 | 1.00 |
| 9 | 2 3/4 | 7/16 | 1 3/4 x 1/2 | .45 | .... |
| 11 | 3 | 1/2 | 2 x 5/8 | .55 | .... |
| 13 | 3 3/4 | 5/8 | 2 1/2 x 3/4 | 1.15 | .... |
| 15 | 4 3/8 | 3/4 | 3 x 7/8 | 1.65 | ... |

DOUBLE

Cast brass; polished and malleable iron; hot galvanized finish.

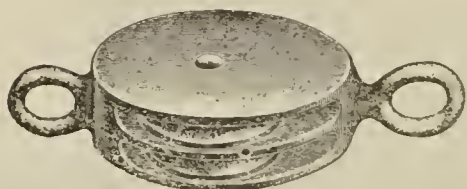


| Nos. | Length Shell, Inches | Diameter of Rope, Inch | Size Sheave, Inches | Each | |
|------|-------------------------|---------------------------|------------------------|------------|--------|
| | | | | Galvanized | Brass |
| 2 | 1 3/4 | 3/16 | 3/4 x 1/4 | \$0.17 | \$.60 |
| 4 | 1 5/8 | 1/4 | 1 x 5/16 | .24 | .80 |
| 6 | 2 1/8 | 5/16 | 1 3/8 x 3/8 | .33 | 1.10 |
| 8 | 2 1/4 | 3/8 | 1 1/2 x 1/2 | .43 | 1.50 |
| 10 | 2 3/4 | 7/16 | 1 3/4 x 1/2 | .60 | .... |
| 12 | 3 1/8 | 1/2 | 2 x 5/8 | .75 | .... |
| 14 | 4 | 5/8 | 2 1/2 x 3/4 | 1.40 | .... |
| 16 | 5 | 3/4 | 3 x 7/8 | 2.00 | .... |

EYE AND BECKET
Single

Malleable iron; hot galvanized finish.

| Nos. | Length Shell, Inches | Diameter of Rope, Inch | Size Sheave, Inches | Each | |
|--------|-------------------------|---------------------------|------------------------|------------|-------|
| | | | | Galvanized | Brass |
| 1 1/2 | 1 1/4 | 3/16 | 3/4 x 1/4 | \$0.10 | |
| 3 1/2 | 1 5/8 | 1/4 | 1 x 5/16 | .13 | |
| 5 1/2 | 2 | 5/16 | 1 3/8 x 7/16 | .21 | |
| 7 1/2 | 2 1/4 | 3/8 | 1 1/2 x 1/2 | .28 | |
| 9 1/2 | 2 3/4 | 7/16 | 1 3/4 x 1/2 | .45 | |
| 11 1/2 | 3 | 1/2 | 2 x 5/8 | .55 | |
| 13 1/2 | 3 3/4 | 5/8 | 2 1/2 x 3/4 | 1.15 | |
| 15 1/2 | 4 1/2 | 3/4 | 3 x 7/8 | 1.65 | |



| Nos. | Length Shell, Inches | Diameter of Rope, Inch | Size Sheave, Inches | Each | |
|--------|-------------------------|---------------------------|------------------------|------------|-------|
| | | | | Galvanized | Brass |
| 2 1/2 | 1 3/8 | 3/16 | 3/4 x 1/4 | \$0.17 | |
| 4 1/2 | 1 5/8 | 1/4 | 1 x 5/16 | .24 | |
| 6 1/2 | 2 1/8 | 5/16 | 1 3/8 x 3/8 | .33 | |
| 8 1/2 | 2 1/4 | 3/8 | 1 1/2 x 1/2 | .43 | |
| 10 1/2 | 2 3/4 | 7/16 | 1 3/4 x 1/2 | .60 | |
| 12 1/2 | 3 1/4 | 1/2 | 2 x 5/8 | .75 | |
| 14 1/2 | 4 | 5/8 | 2 1/2 x 3/4 | 1.40 | |
| 16 1/2 | 4 3/4 | 3/4 | 3 x 7/8 | 2.00 | |

LOOSE HOOK BLOCKS



SINGLE

Hook and Becket

Without Becket



Used with davits on small boats, handy billies, etc. Cast malleable iron shells with wrought iron hooks; hot galvanized finish. With or without becketts.

| Plain | Nos. | Length Shell, Inches | Diameter of Rope, Inch | Size Sheave, Inches | Each |
|-------|------|-------------------------|---------------------------|------------------------|--------|
| | | | | | |
| | 1 | 1 1/4 | 3/16 | 3/4 x 1/4 | \$0.55 |
| | 3 | 1 5/8 | 1/4 | 1 x 5/16 | .60 |
| | 5 | 2 | 5/16 | 1 3/8 x 7/16 | .65 |
| | 7 | 2 1/4 | 3/8 | 1 1/2 x 1/2 | .80 |
| | 9 | 2 3/4 | 7/16 | 1 3/4 x 1/2 | 1.10 |
| | 11 | 3 | 1/2 | 2 x 5/8 | 1.25 |
| | 13 | 3 3/4 | 5/8 | 2 1/2 x 3/4 | 1.95 |
| | 15 | 4 1/2 | 3/4 | 3 x 7/8 | 2.90 |



With Becket

Without Becket



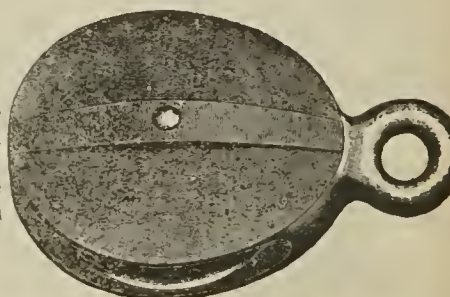
Cast malleable iron shells with wrought iron loose hooks; hot galvanized finish. Furnished with or without becketts.

| Plain | Nos. | Length Shell, Inches | Diameter of Rope, Inch | Size Sheave, Inches | Each |
|-------|------|-------------------------|---------------------------|------------------------|--------|
| | | | | | |
| | 2 | 2 1/2 | 1 3/8 | 3/4 x 1/4 | \$0.60 |
| | 4 | 4 1/2 | 1 5/8 | 1 x 5/16 | .70 |
| | 6 | 6 1/2 | 2 1/8 | 1 3/8 x 3/8 | .85 |
| | 8 | 8 1/2 | 2 1/4 | 1 1/2 x 1/2 | .95 |
| | 10 | 10 1/2 | 3 | 1 3/4 x 1/2 | 1.30 |
| | 12 | 12 1/2 | 3 1/4 | 2 x 5/8 | 1.55 |
| | 14 | 14 1/2 | 4 | 2 1/2 x 3/4 | 2.50 |
| | 16 | 16 1/2 | 4 3/4 | 3 x 7/8 | 3.50 |

WIRE ROPE BLOCKS

WITH EYE

Cast iron; hot galvanized finish. With solid eyes. Furnished with single eye, eye and becket or with wrought single hook.



With Eye

| Nos. | Size Sheave, Inches | Length Shell, Inches | Diameter Rope, Inch | Each |
|------|---------------------------|----------------------------|---------------------------|--------|
| | | | | |
| 5293 | 1/2 x 4 | 5 | 5/16 | \$2.00 |
| 5294 | 1/2 x 4 | 5 | 5/16 | 2.00 |
| 5295 | 1/2 x 4 | 5 | 5/16 | 2.50 |

With Eye and Becket

With Wrought Single Hook

WOOD TACKLE BLOCKS**REGULAR—INSIDE IRON STRAPPED****With Heavy Loose Side Hooks—For Manila Rope**

Lignum-vitae or iron sheaves; finished hardwood shells. The metaline and phosphor bronze bushed blocks have extra heavy hooks. Becket furnished on all single, one-half, double and one-third triple blocks without extra charge.

SINGLE SHEAVES

| Length Shell, Inches | For Diam. Rope Inches | Iron Bushed, Each | Patent 6-Roller Bushed and Self-Adjust. 5-Roller Bushed, Each | Phosphor Bronze Bushed Self-Lub. & Metaline Bushed Each, |
|----------------------------|--------------------------------|-------------------------|---|---|
| 3 | $\frac{3}{8}$ | \$0.70 | \$1.10 | .... |
| 3½ | $\frac{3}{8}$ | .75 | 1.15 | .... |
| 4 | $\frac{1}{2}$ | .85 | 1.20 | \$1.50 |
| 5 | $\frac{5}{8}$ | .90 | 1.25 | 1.75 |
| 6 | $\frac{3}{4}$ | 1.10 | 1.50 | 2.20 |
| 7 | $\frac{7}{8}$ | 1.30 | 1.70 | 2.50 |
| 8 | 1 | 1.65 | 2.25 | 3.25 |
| 9 | 1 | 1.85 | 2.50 | 3.70 |
| 10 | 1½ | 2.75 | 3.50 | 4.75 |
| 11 | 1½ | 4.45 | 5.30 | 6.75 |
| 12 | 1½ | 4.45 | 5.30 | 6.75 |
| 13 | 1½ | 7.00 | 8.15 | 9.75 |
| 14 | 1½ | 7.00 | 8.15 | 9.75 |
| 15 | 1½ | 8.00 | 9.25 | 11.00 |
| 16 | 1½ | 10.00 | 11.50 | 14.00 |

DOUBLE SHEAVES

| Length Shell, Inches | For Diam. Rope, Inches | Iron Bushed, Each | Patent 6-Roller Bushed, Each | Phosphor Bronze or Metaline Bushed Self- Lubricating, Each |
|----------------------------|---------------------------------|-------------------------|---------------------------------------|---|
| 3 | $\frac{3}{8}$ | \$1.30 | \$2.00 | .... |
| 3½ | $\frac{3}{8}$ | 1.45 | 2.20 | .... |
| 4 | $\frac{1}{2}$ | 1.60 | 2.25 | \$2.90 |
| 5 | $\frac{5}{8}$ | 1.75 | 2.35 | 3.35 |
| 6 | $\frac{3}{4}$ | 2.00 | 2.85 | 4.00 |
| 7 | $\frac{7}{8}$ | 2.40 | 3.35 | 4.50 |
| 8 | 1 | 2.85 | 4.15 | 5.70 |
| 9 | 1 | 3.40 | 4.70 | 6.75 |
| 10 | 1½ | 4.50 | 6.00 | 8.50 |
| 11 | 1½ | 7.50 | 9.20 | 12.50 |
| 12 | 1½ | 7.50 | 9.20 | 12.50 |
| 13 | 1½ | 10.50 | 12.80 | 17.00 |
| 14 | 1½ | 10.50 | 12.80 | 17.00 |
| 15 | 1½ | 13.00 | 15.50 | 19.50 |
| 16 | 1½ | 15.00 | 18.00 | 24.00 |

TRIPLE SHEAVES

| Length Shell, Inches | For Diam. Rope, Inches | Iron Bushed, Each | Patent 6-Roller Bushed, Each | Phosphor Bronze or Metaline Bushed Self- Lubricating, Each |
|----------------------------|---------------------------------|-------------------------|---------------------------------------|---|
| 3 | $\frac{3}{8}$ | \$1.75 | \$2.90 | .... |
| 3½ | $\frac{3}{8}$ | 2.00 | 3.15 | .... |
| 4 | $\frac{1}{2}$ | 2.15 | 3.25 | \$4.15 |
| 5 | $\frac{5}{8}$ | 2.25 | 3.50 | 4.75 |
| 6 | $\frac{3}{4}$ | 2.90 | 4.40 | 5.80 |
| 7 | $\frac{7}{8}$ | 3.50 | 5.00 | 6.70 |
| 8 | 1 | 4.25 | 6.00 | 8.50 |
| 9 | 1 | 4.75 | 7.25 | 10.00 |
| 10 | 1½ | 6.25 | 8.50 | 12.50 |
| 11 | 1½ | 10.65 | 13.20 | 18.50 |
| 12 | 1½ | 10.65 | 13.20 | 18.50 |
| 13 | 1½ | 15.00 | 18.45 | 25.00 |
| 14 | 1½ | 15.00 | 18.45 | 25.00 |
| 15 | 1½ | 18.00 | 21.75 | 28.50 |
| 16 | 1½ | 22.00 | 26.50 | 34.00 |

DIMENSIONS OF WOOD TACKLE BLOCKS

| Length Shell, Ins. | Size Sheave, Inches | For Diam. Rope, ——— | | Weight Each, Lbs. ——— | | Extra For Becketts | |
|-------------------------------|---|-------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------------|--|
| | | Inches | Single | Double | Triple | Each, Net. | |
| 3 | 1 ³ / ₄ x 1 ¹ / ₂ x ³ / ₈ | ³ / ₈ | ³ / ₄ | 1 ¹ / ₂ | 2 | \$0.05 | |
| 3 ¹ / ₂ | 2 x 1 ¹ / ₂ x ³ / ₈ | ³ / ₈ | 1 | 1 ³ / ₄ | 2 ³ / ₈ | .05 | |
| 4 | 2 ¹ / ₄ x ⁵ / ₈ x ³ / ₈ | ¹ / ₂ | 1 ¹ / ₂ | 2 ¹ / ₄ | 3 ¹ / ₂ | .05 | |
| 5 | 3 x ³ / ₄ x ³ / ₈ | ⁵ / ₈ | 2 ¹ / ₂ | 4 ¹ / ₄ | 6 | .05 | |
| 6 | 3 ¹ / ₂ x 1 ¹ / ₂ x ¹ / ₂ | ³ / ₄ | 4 ¹ / ₄ | 7 | 10 ¹ / ₂ | .06 | |
| 7 | 4 ¹ / ₄ x 1 ¹ / ₂ x ¹ / ₂ | ⁷ / ₈ | 6 | 8 ¹ / ₂ | 13 ¹ / ₂ | .07 | |
| 8 | 4 ³ / ₄ x 1 ¹ / ₂ x ⁵ / ₈ | 1 | 9 | 13 | 19 | .08 | |
| 9 | 5 ¹ / ₂ x 1 ¹ / ₂ x ⁵ / ₈ | 1 | 12 | 17 | 25 | .09 | |
| 10 | 6 ¹ / ₄ x 1 ¹ / ₂ x ⁵ / ₈ | 1 ¹ / ₈ | 15 ¹ / ₂ | 23 ¹ / ₂ | 33 | .10 | |
| 11 | 7 ¹ / ₄ x 1 ¹ / ₂ x ³ / ₄ | 1 ¹ / ₈ | 19 | 26 | 40 | .11 | |
| 12 | 8 x 1 ³ / ₈ x ³ / ₄ | 1 ¹ / ₄ | 24 | 36 | 48 | .12 | |
| 13 | 9 x 1 ¹ / ₂ x ³ / ₄ | 1 ¹ / ₄ | 30 | 43 | 60 | .13 | |
| 14 | 9 ¹ / ₂ x 1 ⁵ / ₈ x ⁷ / ₈ | 1 ³ / ₈ | 38 | 58 | 80 | .14 | |
| 15 | 10 x 1 ⁵ / ₈ x ⁷ / ₈ | 1 ¹ / ₂ | 40 | 62 | 87 | .15 | |
| 16 | 11 x 1 ³ / ₄ x ⁷ / ₈ | 1 ⁵ / ₈ | 54 | 77 | 115 | .16 | |

Note—For tackle blocks with shackles, rings, stiff swivel hooks, match, eye and becket and loose front hooks use list price of regular loose side hook blocks.

STEEL TACKLE BLOCKS**STANDARD—WITH LOOSE SIDE HOOKS****FOR MANILA ROPE**

High grade steel shells and pins; forged hooks and straps; japanned cast iron sheaves; straps extend to bottom of shell and support the rope thimble; with or without becket; with loose side hooks.

WITH SINGLE SHEAVES

| Length Shell, Inches | For Diam. Rope, Inches | Iron Bushed, Each | Patent 6-Roller Bushed, Each | Phosphor, Bronze or Metaline Bushed Self- Lubricating Each |
|----------------------------|---------------------------------|-------------------------|---------------------------------------|---|
| 3 | $\frac{3}{8}$ | \$0.70 | \$1.10 | .... |
| 4 | $\frac{1}{2}$ | .85 | 1.20 | \$1.50 |
| 5 | $\frac{5}{8}$ | .90 | 1.25 | 1.75 |
| 6 | $\frac{3}{4}$ | 1.10 | 1.50 | 2.20 |
| 7 | $\frac{7}{8}$ | 1.30 | 1.70 | 2.50 |
| 8 | 1 | 1.65 | 2.25 | 3.25 |
| 9 | 1 | 1.85 | 2.50 | 3.70 |
| 10 | 1½ | 2.75 | 3.50 | 4.75 |
| 12 | 1½ | 4.45 | 5.30 | 6.75 |

WITH DOUBLE SHEAVES

| Length Shell, Inches | For Diam. Rope, Inches | Iron Bushed, Each | Patent 6-Roller Bushed, Each | Phosphor Bronze or Metaline Bushed Self- Lubricating, Each |
|----------------------------|---------------------------------|-------------------------|---------------------------------------|---|
| 3 | $\frac{3}{8}$ | \$1.30 | \$2.00 | .... |
| 4 | $\frac{1}{2}$ | 1.60 | 2.25 | \$2.90 |
| 5 | $\frac{5}{8}$ | 1.75 | 2.35 | 3.35 |
| 6 | $\frac{3}{4}$ | 2.00 | 2.85 | 4.00 |
| 7 | $\frac{7}{8}$ | 2.40 | 3.35 | 4.50 |
| 8 | 1 | 2.85 | 4.15 | 5.70 |
| 9 | 1 | 3.40 | 4.70 | 6.75 |
| 10 | 1½ | 4.50 | 6.00 | 8.50 |
| 12 | 1½ | 7.50 | 9.20 | 12.50 |

METAL CARGO HOISTING BLOCKS**WITH SWIVEL HOOK****For Manila or Wire Rope**

All metal block with galvanized malleable iron shell, drop forged connections, galvanized iron sheave fitted with self-lubricating side bearings. Edges of shell rounded to prevent cutting the rope.

| Size Sheave, Inches | For Wire Rope, Inch | For Manila Rope, Inches | Length Shell, Inches | Phosphor Bronze or Metaline Bushed Self-Lubr., Each |
|---------------------------|------------------------------|----------------------------------|----------------------------|--|
| 8x1½x¾ | $\frac{5}{8}$ | 1¼ | 10 | \$19.60 |
| 9x1½x¾ | $\frac{5}{8}$ | 1¼ | 11½ | 23.45 |
| 10x1¾x¾ | $\frac{3}{4}$ | 1½ | 12½ | 27.35 |
| 12x1¾x¾ | $\frac{7}{8}$ | 1½ | 14 | 34.55 |
| 14x1¾x1 | 1 | 1½ | 17 | 47.45 |

WITH SHACKLE**For Manila or Wire Rope**

All metal block with galvanized malleable iron shell, drop forged connections, galvanized iron sheave fitted with self-lubricating side bearings. Edges of shell rounded to prevent cutting the rope.

| Size Sheave, Inches | For Wire Rope, Inch | For Manila Rope, Inches | Length Shell, Inches | Phosphor Bronze or Metaline Bushed Self-Lubr., Each |
|---------------------------|------------------------------|----------------------------------|----------------------------|--|
| 8 x 1½ x ¾ | $\frac{5}{8}$ | 1¼ | 10 | \$19.60 |
| 9 x 1½ x ¾ | $\frac{5}{8}$ | 1¼ | 11½ | 23.45 |
| 10 x 1¾ x ¾ | $\frac{3}{4}$ | 1½ | 12½ | 27.35 |
| 12 x 1¾ x ¾ | $\frac{7}{8}$ | 1½ | 14 | 34.55 |
| 14 x 1¾ x 1 | 1 | 1½ | 17 | 47.45 |

SNATCH BLOCKS

TARBOX — FOR MANILA ROPE

A self-locking snatch block recommended to all users of manila rope snatch blocks. The link automatically engages the head and the block cannot come open while in use. The shells are malleable iron and the head and link are drop forged.



| Size Sheave, Inches | Rope Diam. | Shell Length | Graphite Bushed Self-Lubricating |
|---------------------|------------|--------------|----------------------------------|
| 3 x 1 1/8 x 1/2 | 7/8 | 6 | \$4.50 |
| 3 1/2 x 1 1/4 x 1/2 | 7/8 | 7 | 5.50 |
| 4 1/2 x 1 3/8 x 5/8 | 1 | 8 | 6.50 |
| 5 x 1 3/8 x 5/8 | 1 1/8 | 9 | 7.50 |

DROP LINK—FOR MANILA ROPE

Japanned shell with rounded edges; japanned cast iron sheave; wrought iron head, straps and hook; steel pin.

| Length Shell, Inches | Iron Bushed Each | Improved Roller Bushed, Each | Phosphor Bronze or Metaline, Bushed, Each | Self Lubricating Iron Bushed, Each |
|----------------------|------------------|------------------------------|---|------------------------------------|
| 6 | \$4.00 | \$4.65 | \$5.25 | \$4.00 |
| 7 | 4.75 | 5.50 | 6.00 | 5.75 |
| 8 | 5.75 | 6.60 | 7.25 | 5.75 |
| 9 | 6.75 | 7.75 | 8.50 | 6.75 |
| 10 | 8.50 | 10.00 | 11.00 | 8.50 |
| 12 | 10.00 | 11.50 | 13.00 | 10.00 |
| 14 | 13.00 | 15.00 | 16.50 | ..... |
| 16 | 17.00 | 20.00 | 22.00 | ..... |
| 18 | 25.00 | 28.50 | 31.00 | ..... |
| 20 | 38.00 | 43.00 | 46.00 | ..... |
| 22 | 55.00 | 63.00 | 68.00 | ..... |
| 24 | 70.00 | 78.00 | 86.00 | ..... |
| 26 | 90.00 | ..... | 110.00 | ..... |



DROP LINK—HARDWOOD SHELL FOR MANILA ROPE

Varnished hardwood shells with wrought iron head, straps and hooks. Shells are double cross bolted and the bow straps on each side extend to the bottom of the shell.



| Length, Shell, Inches | Iron Bushed, Each | Patent 6-Roller, Bushed, Each | Phosphor Bronze or Metaline Bushed, Each | Self Lubricating Iron Bushed, Each |
|-----------------------|-------------------|-------------------------------|--|------------------------------------|
| 6 | \$4.00 | \$4.65 | \$5.25 | \$4.00 |
| 7 | 4.75 | 5.50 | 6.00 | 4.75 |
| 8 | 5.75 | 6.60 | 7.25 | 5.75 |
| 9 | 6.75 | 7.75 | 8.50 | 6.75 |
| 10 | 8.50 | 10.00 | 11.00 | 8.50 |
| 12 | 10.00 | 11.50 | 13.00 | 10.00 |
| 14 | 13.00 | 15.00 | 16.50 | 13.00 |
| 16 | 17.00 | 20.00 | 22.00 | 17.00 |
| 18 | 25.00 | 28.50 | 31.00 | 25.00 |
| 20 | 38.00 | 43.00 | 46.00 | 38.00 |
| 22 | 55.00 | 63.00 | 68.00 | 55.00 |
| 24 | 70.00 | 78.00 | 86.00 | 70.00 |
| 26 | 90.00 | ..... | 110.00 | 90.00 |

DIMENSIONS OF MANILA ROPE SNATCH BLOCKS

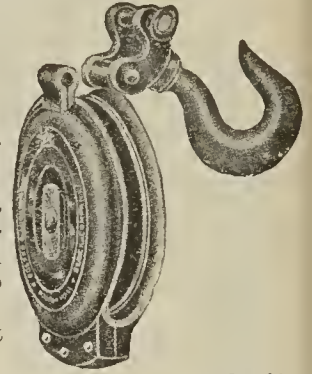
| Length Shell, Inches | Size Sheave, Inches | For Rope, Inches | Weight Each, Lbs. |
|----------------------|------------------------|------------------|-------------------|
| 6 | 3 x 1 1/8 x 1/2 | 7/8 | 6 1/2 |
| 7 | 3 1/2 x 1 1/4 x 1/2 | 7/8 | 8 1/2 |
| 8 | 4 1/2 x 1 3/8 x 5/8 | 1 | 12 |
| 9 | 5 x 1 3/8 x 5/8 | 1 1/8 | 14 |
| 10 | 5 3/4 x 1 7/8 x 3/4 | 1 1/4 | 22 |
| 12 | 6 3/4 x 2 1/8 x 3/4 | 1 1/2 | 31 |
| 14 | 8 x 2 1/4 x 7/8 | 1 3/4 | 44 |
| 16 | 9 x 2 5/8 x 1 | 2 | 63 |
| 18 | 10 x 3 x 1 1/8 | 2 1/4 | 89 |
| 20 | 11 x 3 1/2 x 1 1/4 | 2 1/2 | 128 |
| 22 | 11 3/4 x 4 1/4 x 1 1/2 | 3 | 170 |
| 24 | 12 1/2 x 4 1/2 x 1 1/2 | 3 1/2 | 205 |
| 26 | 14 x 4 3/4 x 1 3/4 | 4 | 295 |

TARBOX SNATCH BLOCKS

TARBOX—FOR WIRE ROPE

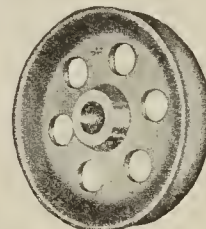
Extra heavy flattened hook; head and straps are made of forged steel. Malleable iron shell with rounded edges to prevent wear on rope. Sheave has bearing at hub only, and is so fitted in shell it is impossible for wire to slip between shell and sheave.

Patented closing arrangement holds block stiffly.

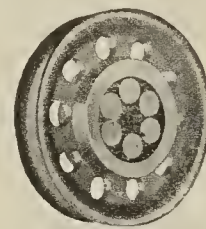


| Size Sheave, Inches | For Diam. Rope, Inches | Graphite Bronze or Self Lubr., Bushed, Each | Size Sheave, Inches | For Diam. Rope, Inches | Graphite Bronze or Self Lubr., Bushed, Each |
|---------------------|------------------------|---|-------------------------|------------------------|---|
| 6x1 x 3/4 | 3/8 | \$10.75 | 14x1 1/2 x 1 1/4 | 3/4 | \$39.10 |
| 8x1 1/4 x 7/8 | 1/2 | 15.57 | 16x1 3/4 x 1 1/2 | 7/8 | 59.77 |
| 10x1 1/4 x 1 | 5/8 | 20.35 | 18x1 3/4 x 1 1/2 | 1 | ..... |
| 12x1 1/2 x 1 1/8 | 3/4 | 29.88 | Add for Galv., lb., .03 | | |

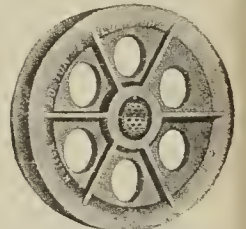
IRON SHEAVES FOR MANILA ROPE FOR REGULAR AND WIDE MORTISE BLOCKS



Iron Bushed



Six-roller Bushed



Star Metaline or Graphite-bronze Bushed

Japanned or galvanized.

Price, Each

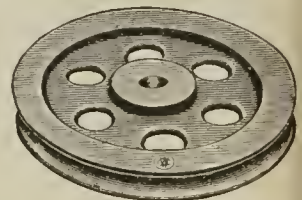
| Dimensions, Inches | Sheaves | Shell | Iron Bushed | Six-roller Bushed | Star Metaline or Graphite-bronze Bushed |
|---------------------|---------|-------|-------------|-------------------|---|
| 1 3/4 x 1 1/2 x 3/8 | | 3 | \$0.09 | \$0.40 | ..... |
| 2 x 1 1/2 x 3/8 | | 3 1/2 | .10 | .42 | \$0.75 |
| 2 1/4 x 5/8 x 3/8 | | 4 | .12 | .45 | .80 |
| 3 x 3/4 x 3/8 | | 5 | .20 | .55 | .90 |
| 3 1/2 x 1 x 1/2 | | 6 | .25 | .65 | 1.40 |
| 4 1/4 x 1 x 1/2 | | 7 | .30 | .75 | 1.50 |
| 4 1/4 x 1 1/8 x 1/2 | | 7 | .35 | 1.00 | 1.60 |
| 4 1/4 x 1 1/8 x 5/8 | | 8 | .36 | 1.00 | 1.85 |
| 4 1/2 x 1 3/8 x 5/8 | | 8 | .40 | 1.15 | 1.90 |
| 5 1/2 x 1 1/8 x 5/8 | | 9 | .45 | 1.10 | 1.95 |
| 5 3/8 x 1 3/8 x 5/8 | | 9 | .50 | 1.25 | 2.10 |
| 6 1/4 x 1 1/4 x 5/8 | | 10 | .55 | 1.35 | 2.25 |
| 6 1/4 x 1 1/2 x 3/4 | | 10 | .65 | 1.60 | 2.75 |
| 8 x 1 3/8 x 3/4 | | 12 | .90 | 1.90 | 2.95 |
| 8 x 1 5/8 x 3/4 | | 12 | 1.05 | 2.10 | 3.25 |
| 9 1/2 x 1 5/8 x 7/8 | | 14 | 1.40 | 2.65 | 3.60 |
| 9 1/2 x 1 7/8 x 7/8 | | 14 | 1.50 | 2.85 | 4.20 |
| 11 x 1 3/4 x 7/8 | | 16 | 1.70 | 3.20 | 4.90 |
| 11 x 2 1/4 x 1 | | 16 | 2.00 | 3.50 | 5.95 |

WIRE ROPE SHEAVES

No. 8490—COMMON

GALVANIZED CAST IRON OR CAST BRASS

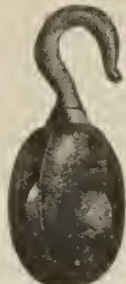
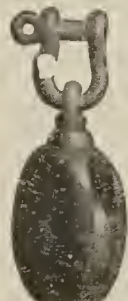
Made with deep groove for wire rope. When ordering give the diameter of the rope and the diameter of the pin.



| Size Inches | Diameter Rope, Inch | Diameter Pin, Inch | Each |
|--------------|---------------------|--------------------|--------|
| 1 7/8 x 7/16 | 5/16 | 5/16 or 3/8 | \$0.30 |
| 2 1/2 x 3/8 | 3/16 | 1/4 or 5/16 | .35 |
| 3 x 9/16 | 3/8 | 3/8 or 7/16 | .45 |
| 3 1/4 x 1/2 | 1/4 | 3/8 or 7/16 | .50 |
| 4 x 5/8 | 3/8 | 3/8 or 7/16 | .75 |
| 4 1/2 x 3/4 | 3/8 | 7/16 or 1/2 | .80 |
| 5 x 7/8 | 5/8 | 7/16 or 1/2 | 1.25 |
| 6 x 1 | 3/4 | 5/8 or 3/4 | 2.00 |

STANDARD YACHT BLOCKS

LIGNUM-VITAE OR ASH, BRASS SCREW FASTENED SHELLS TOBIN BRONZE PINS

Fig. 101
Loose Side Hook
(Long Hook, B Extra)Fig. 102
Loose Front Hook
Takes A Extra
(Long Hook, B Extra)Fig. 103
Loose Swivel Hook
Takes B ExtraFig. 104
Stiff Swivel Hook
Takes D ExtraFig. 105
Stiff Front Hook
Takes D ExtraFig. 106
Side Sister HookFig. 107
Front Sister Hook
Takes A ExtraFig. 108
Front Snap Shackle
(also made to Side)
Takes D ExtraFig. 109
Side Backstay Hook
(also made to Front)
Takes D ExtraFig. 110
Side Coleman Hook
Takes B ExtraFig. 111
Front Coleman Hook
Takes B ExtraFig. 112
Ring
Takes B ExtraFig. 113
Front ShackleFig. 114
Upset Front ShackleFig. 115
Side Shackle
Takes D ExtraFig. 116
Upset Side Shackle
Takes D ExtraFig. 117
Upset Swivel Shackle
Takes F ExtraFig. 118
Lashing EyeFig. 119
Eye and ThimbleFig. 120
Punched Eye
Takes B ExtraFig. 121
Loose Bolt
Takes B ExtraFig. 122
Check BlockFig. 123
Open Snatch BlockFig. 125
Bolt and Spectacle
Takes F ExtraFig. 126
Swivel Jaw and Guy
Eyes
(Give thickness of
davit)

PRICE LIST

This list includes only those fittings for which there is no extra charge.

| Size Block, Inches | —Size Sheave, Inches— | | For Diam. Pin Rope, In. | Roller Bushed Galvanized Sheaves | | | Roller Bushed Bronze Sheaves | | |
|--------------------------|-----------------------|-----------|-------------------------------|-------------------------------------|-----------------|-----------------|---------------------------------|-----------------|-----------------|
| | Diam. | Thickness | | Single, Each | Double, Each | Triple, Each | Single, Each | Double, Each | Triple, Each |
| 2½ | 1⅜ | 7/8 | 1/8 | | | | \$3.00 | \$5.50 | \$8.25 |
| 3 | 1¾ | 1½ | 1/8 | 3.00 | \$5.35 | \$8.75 | 3.25 | 5.85 | 9.05 |
| 3½ | 2 | 5/8 | 1/8 | 3.40 | 6.15 | 9.35 | 3.75 | 6.75 | 10.25 |
| 4 | 2¼ | 5/8 | 3/8 | 3.90 | 7.00 | 10.75 | 4.25 | 7.75 | 11.75 |
| 4½ | 2¾ | 3/4 | 3/8 | 4.60 | 8.25 | 12.50 | 5.00 | 9.00 | 13.75 |
| 5 | 3 | 13/16 | 3/8 | 5.50 | 10.00 | 15.00 | 6.00 | 11.00 | 16.50 |
| 6 | 3½ | 1 | 1/2 | 6.75 | 12.00 | 18.50 | 7.50 | 13.50 | 20.50 |

EXTRAS FOR SPECIAL FITTINGS

For some fittings illustrated on this page there is an extra charge in addition to the price of the block. Under the illustrations of blocks with special fittings appears the caption, "Takes A (or B, etc.,) Extra."

This extra charge is found in the following list under the designating letters (A to G, inclusive) and varies with the size of the block.

| Size of Block, Inches | A | B | C | D | E | F | G |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|
| 2½ and 3 | \$0.30 | \$0.75 | \$1.25 | \$2.00 | \$2.50 | \$3.00 | \$5.00 |
| 3½ and 4 | .40 | 1.00 | 1.50 | 2.25 | 3.00 | 4.00 | 6.00 |
| 4½ and 5 | .50 | 1.25 | 2.00 | 2.50 | 4.00 | 5.00 | 7.00 |
| 6 | .60 | 1.50 | 2.50 | 3.00 | 5.00 | 6.00 | 8.00 |

Note.— Any of the fittings shown on this page can be furnished on single, double or triple blocks and with or without beak. Blocks with self-lubricating sheaves furnished at an additional charge.

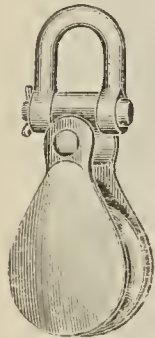
BRONZE YACHT BLOCKS

MANGANESE BRONZE—NEW PATTERN

OVAL TYPE SHELLS

Without Becket

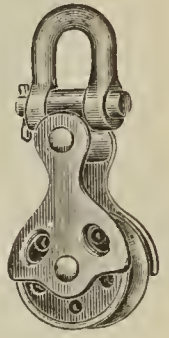
With Becket



OPEN TYPE SHELLS

With Becket

Without Becket



Cuts shown above are merely to illustrate the two types of Bronze Yacht Block Shells, with Becket and without Becket. The Open Shell is for extreme lightness.

The Oval Shell is for general use and for this reason cuts at bottom of this page and on the following page show various fittings with Oval Shells.

The Open Shell can be furnished with any of the fittings illustrated on Oval Shell Blocks.

Lists under cuts apply to either type of Shell.

The Bronze Yacht Blocks shown are of new design with pleasing lines, are small and light, yet with full size Sheaves and large openings for rope. Sheave scores are turned smooth and shell edges rounded and smoothed so there will be no tendency to cut or wear rope. Shells and fittings are made of Manganese Bronze with pins of rolled bronze, both of high tensile strength.

Sheaves are of bronze having high compression and bearing qualities.

Pins are large diameter, allowing sheaves to turn freely and insuring long life to the Blocks. In these Blocks are combined strength, neatness, lightness, durability and practicability for modern yachting conditions.

Front Shackle

Side Shackle

Upset Front Shackle

Upset Side Shackle

*Loose Side Hook

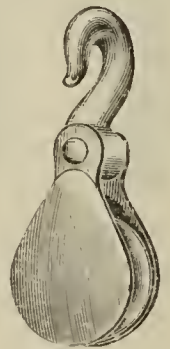
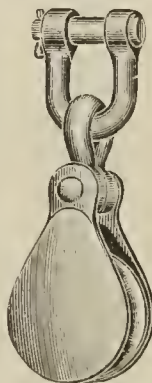
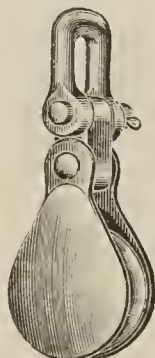
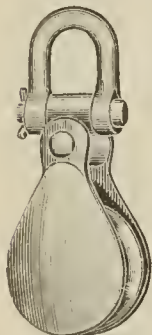


Figure Numbers—Oval Shells

P-9960
B-9960

P-9970
B-9970

P-9980
B-9980

P-10000
B-10000

P-9950
B-9950

Figure Numbers—Open Shells

P-9661
B-9961

P-9971
B-9971

P-9981
B-9981

P-10001
B-10001

P-9951
B-9951

Specify whether Single or Double, with or without Becket, Plain or Polished is required.

Size
NumbersSize of Sheave,
InchesFor Rope Diam.,
Inches

—Price, Each—

Single

Double

0

 $1\frac{1}{8} \times \frac{7}{16}$ $\frac{5}{16}$

\$1.00

\$1.75

1

 $1\frac{3}{8} \times \frac{1}{2}$ $\frac{3}{8}$

1.50

2.75

2

 $1\frac{7}{8} \times \frac{5}{8}$ $\frac{7}{16}$

2.25

4.00

BRONZE BLOCK SHACKLES

MANGANESE BRONZE

As shown on Blocks above, Fig. B-2151—P-2151.

| Size Numbers | Size, Inches | Price, Each | |
|-----------------|-----------------|-----------------|--------------------|
| | | Plain Bronze | Polished Bronze |
| 0 | $\frac{3}{16}$ | \$0.30 | \$0.45 |
| 1 | $\frac{1}{4}$ | .35 | .50 |
| 2 | $\frac{5}{16}$ | .45 | .60 |
| 3 | $\frac{3}{8}$ | .55 | .75 |

SPECIAL NOTES

All Blocks are furnished plain bushed, unless otherwise specified.

Bronze Yacht Blocks with Shackles or Halyard Deck Leader can be supplied either single or double. All other Blocks supplied in single only.

*Blocks with Loose Front Hook can also be furnished.

Blocks can be furnished with Roller Bushed Sheaves the same sizes as used in 2½, 3 and 4 inch Wood Blocks. Prices on application.

BRONZE YACHT BLOCKS

MANGANESE BRONZE

NEW PATTERN

Main Sheet Bridle



Link Deck Leader

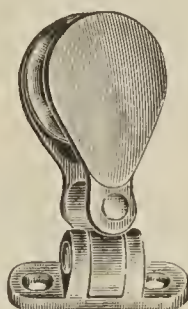


Figure Numbers—Oval Shells

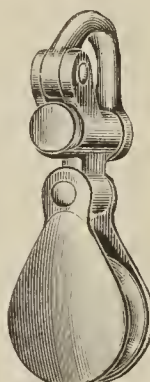
P-10010 P-10070
B-10010 B-10070

Figure Numbers—Open Shells

P-10011 P-10071
B-10011 B-10071

| Size Number | Price Each, Single |
|----------------|-----------------------|
| 0 | \$1.50 |
| 1 | 2.25 |
| 2 | 3.25 |

Side Snap Shackle



Halyard Deck Leader

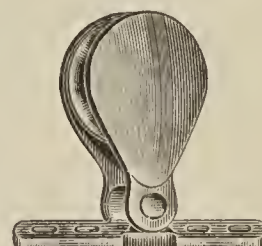


Figure Numbers—Oval Shells

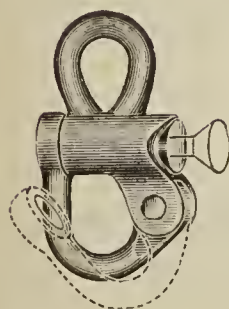
P-10072 P-10030
B-10072 B-10030

Figure Numbers—Open Shells

P-10073 P-10031
B-10073 B-10031

| Size Nos. | Price, Each | Size Nos. | Price, Each | |
|--------------|----------------|--------------|-------------|--------|
| | | | Single | Double |
| 0 | \$2.10 | 0 | \$1.25 | \$2.25 |
| 1 | 2.85 | 1 | 1.85 | 3.10 |
| 2 | 4.00 | 2 | 2.75 | 4.50 |

Snap Shackle



Bullet Blocks on Snap Shackle for Jib Sheets

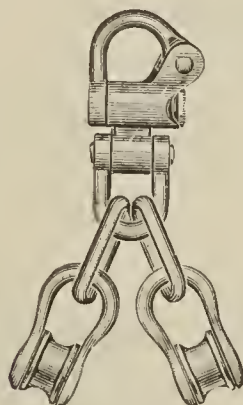


Fig. P-11000—B-11000 Fig. P-10050—B-10050

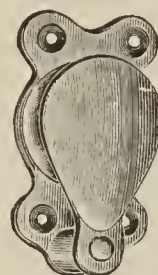
| PLAIN | | | | POLISHED | | | |
|--------------|-----------------|----------------|----------------|---------------|---------------------------|------------------|--|
| Size Nos. | Size, Inches | Price, Each | Price, Each | Size, Nos. | For Diam. Rope, Inches | Price per Set | |
| 0 | $\frac{3}{16}$ | \$0.85 | \$1.25 | 0 | $\frac{5}{16}$ | \$3.25 | |
| 1 | $\frac{1}{4}$ | 1.00 | 1.50 | 1 | $\frac{3}{8}$ | 3.75 | |
| 2 | $\frac{5}{16}$ | 1.25 | 1.75 | | | | |

SPECIAL NOTES

All Blocks are furnished plain bushed, unless otherwise specified.

Bronze Snap Shackles shown above are made of high tensile metal, easy and quick to operate.

Cheek Block



Swivel Deck Leader

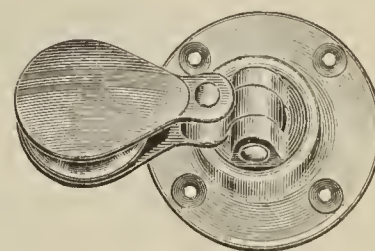


Figure Numbers—Oval Shells

P-10075 P-10060
B-10075 B-10060

Figure Numbers—Open Shells

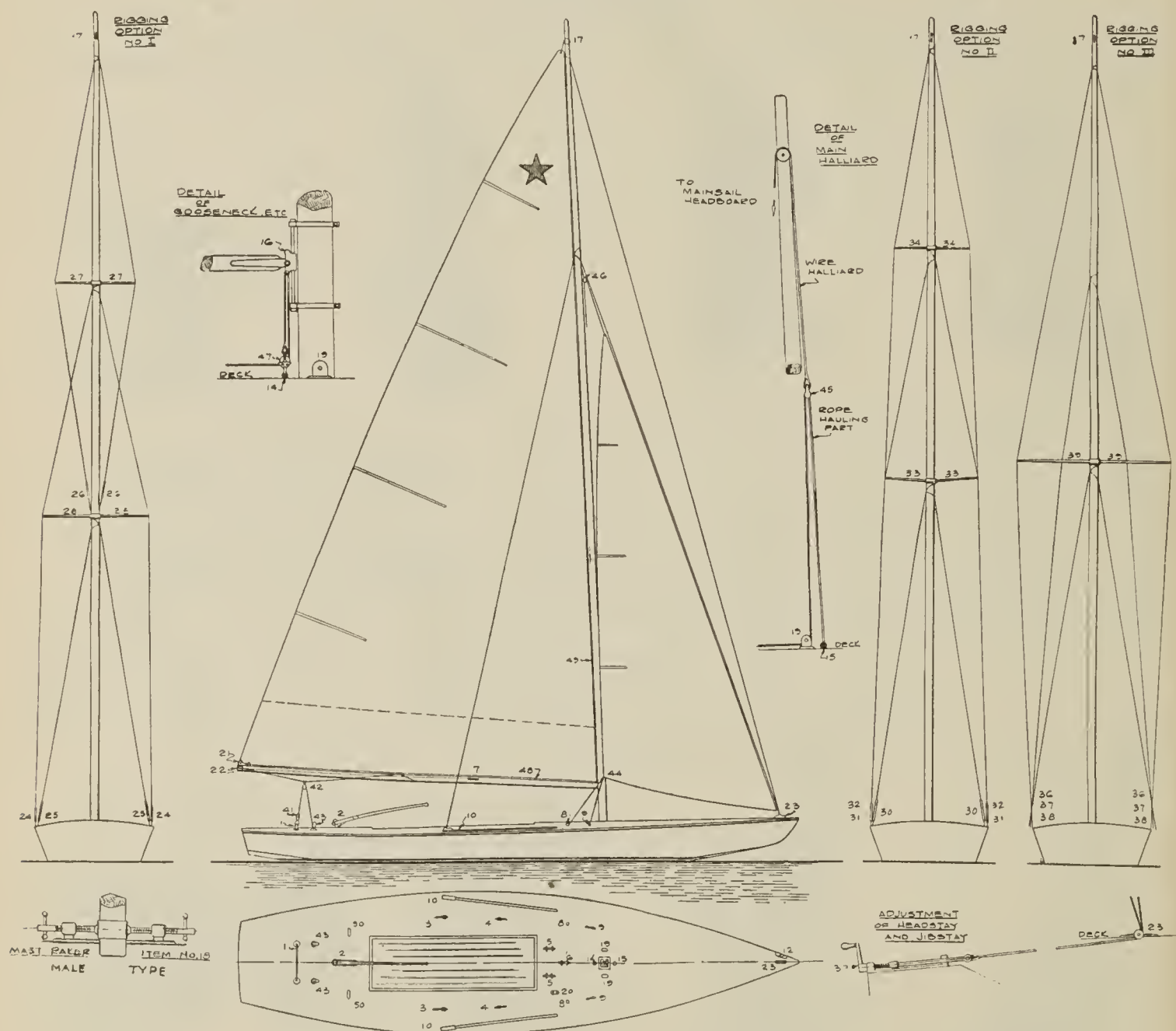
Made Only
in
Oval Shell P-10061
B-10061

| Size Nos. | Price, Each | | Size Nos. | Price Each |
|--------------|-------------|--------|--------------|---------------|
| | Single | Double | | |
| 0 | \$1.00 | \$1.75 | 0 | \$2.25 |
| 1 | 1.50 | 2.75 | 1 | 3.00 |
| 2 | 2.25 | 4.00 | 2 | 4.00 |

The Bronze Cheek Blocks listed above are a heavy pattern for halyard leads and places where the block must carry a heavy load.

These have four screw holes for secure fastening.

★ LIST OF STAR CLASS HARDWARE ★ NEW MARCONI PLAN



| Item | Required | Description | Price, Each |
|------|----------|---|-------------|
| 1 | 1 | Mainsheet Traveller..... | \$3.50 |
| 2 | 1 | Tiller Fitting..... | 8.00 |
| 3 | 2 | Mainsheet Jam Cleats..... | 1.20 |
| 4 | 2 | Jibsheet Jam Cleats..... | .33 |
| 5 | 2 | Halliard Cleats..... | 1.20 |
| 6 | 1 | Gooseneck Downhaul Cleat..... | 1.20 |
| 7 | 1 | Outhaul Cleat..... | .33 |
| 8 | 2 | Jibsheet Fairleaders..... | .24 |
| 9 | 2 | Jibsheet Flange Eyes..... | .24 |
| 10 | 1 Pair | Backstay Runners..... | 20.00 Pair |
| 11 | 2 | Lifting Lugs..... | .30 |
| 12 | 1 | Bow Chock..... | 1.25 Pair |
| 13 | 2 | Turnbuckles for Headstay and Jibstay..... | 5.00 |
| 14 | 1 | Eyebolt for Gooseneck Downhaul..... | 1.05 |
| 15 | 1 | Eyebolt for Main Halliard..... | 1.05 |
| 16 | 1 | Gooseneck..... | 8.00 |
| 17 | 1 | Mast Head Sheave..... | 1.50 |
| 18 | 1 | Mast Raker..... | 8.00 |
| 19 | 2 | Deck Halliard Blocks..... | 2.40 |
| 20 | 1 | Mainsheet Snatchblock..... | 1.50 |
| 21 | 1 | Outhaul..... | 3.50 |
| 22 | 1 | Outhaul Block with Cable..... | 1.15 |
| 23 | 1 | Fitting for Headstay and Jibstay..... | 2.00 |

Rigging—Option No. 1

| | | | |
|----|--------|---------------------------------|-----------|
| 24 | 2 | Turnbuckle; Middle Shrouds..... | 2.75 |
| 25 | 2 | Turnbuckle; Lower Shrouds..... | 3.25 |
| 26 | 2 | Turnbuckle; Upper Shrouds..... | .30 |
| 27 | 1 Pair | Upper Spreaders..... | 6.50 Pair |
| 28 | 1 Pair | Lower Spreaders..... | 7.50 Pair |
| 29 | 4 | Chain Plates..... | 1.50 |

| Item | Required | Description | Price, Each |
|----------------------|----------|----------------------------------|-------------|
| Rigging—Option No. 2 | | | |
| 30 | 2 | Turnbuckles; Lower Shrouds..... | \$2.75 |
| 31 | 2 | Turnbuckles; Middle Shrouds..... | 3.25 |
| 32 | 2 | Turnbuckles; Upper Shrouds..... | 2.75 |
| 33 | 1 Pair | Lower Spreaders..... | 7.50 Pair |
| 34 | 1 Pair | Upper Spreaders..... | 6.50 Pair |
| 35 | 6 | Chain Plates..... | 1.50 |

Rigging—Option No. 3

| | | | |
|----|--------|----------------------------------|-----------|
| 36 | 2 | Turnbuckles; Lower Shrouds..... | \$2.75 |
| 37 | 2 | Turnbuckles; Middle Shrouds..... | 3.25 |
| 38 | 2 | Turnbuckles; Upper Shrouds..... | 2.75 |
| 39 | 1 Pair | Spreaders..... | 8.50 Pair |
| 40 | 6 | Chain Plates..... | 1.50 |

Block List

| | | | |
|----|--------|-----------------------------------|-----------|
| 41 | 1 | Block for Traveller..... | \$2.10 |
| 42 | 2 | Block for Bridle..... | 3.00 |
| 43 | 2 | Quarter Blocks..... | 4.00 |
| 44 | 2 | Blocks for Jib Clew..... | 4.00 |
| 45 | 1 | Block for Main Halliard Jig..... | 1.15 |
| 46 | 1 | Block for Jib Halliard..... | 2.10 |
| 47 | 1 | Block for Gooseneck Downhaul..... | 2.10 |
| 48 | 15 | Foot Track for Boom..... | .25 Foot |
| 49 | 30 | Foot Track for Mast..... | .25 Foot |
| 50 | 1 Pair | Crotch Hooks..... | 3.00 Pair |

Complete Set—For Option No. 1.....Prices on Application
 Complete Set—For Option No. 2.....“ “ “
 Complete Set—For Option No. 3.....“ “ “

★ STAR CLASS HARDWARE ★

MAIN SHEET TRAVELLERS

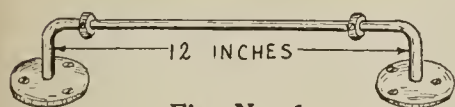


Fig. No. 1

Made of polished bronze with set screw adjusted collar for limiting travel of sheet block.

Each

No. 1\$3.50

TILLER FITTINGS

CAST BRONZE

Designed to fit the 1½ inch diameter standard tiller post. Can also be furnished to fit a 1 inch tiller post. It is secured to the tiller post by two ⅜ inch cap screws. All play in the head is eliminated by a clamp adjustment in rear of the head which prevents any wear on the screws. This fitting may be installed without removing the rudder from the boat. It is only necessary to drill and tap two ⅜-inch holes in the rudder post. Plain finish.

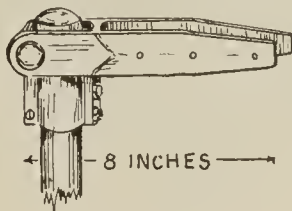


Fig. No. 2

Each

No. 2\$8.00

MAIN SHEET JAM CLEATS

CAST BRONZE

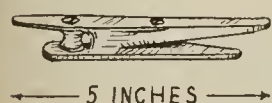


Fig. No. 3A

Combines the features of both a snatch block and a jam cleat. For use with ¼ to ⅜ inch diameter rope. Made of cast bronze polished.

Each

No. 3A\$2.00

JIB SHEET JAM CLEATS

For use with ¼ to ⅜ inch rope.

Made of cast bronze polished.

Each

No. 4A\$1.00

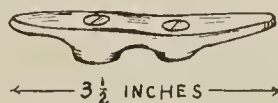


Fig. No. 4A

ADJUSTABLE JIB LEADS

CAST BRONZE

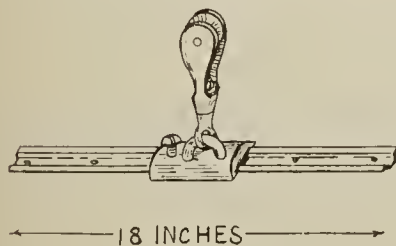
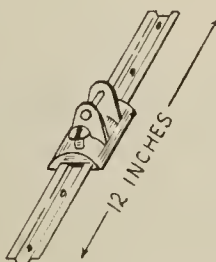


Fig. No. 8A

The full swivel blocks for the jib sheets and the fitting for holding the dead end of the sheets are mounted on tracks so that the leads of the jib sheets may be altered while sailing to find the most effective trim for the jib sheets. Plain finish.

Per Set

No. 8A\$8.00



BACKSTAY RUNNERS

RHODY

TYPE B

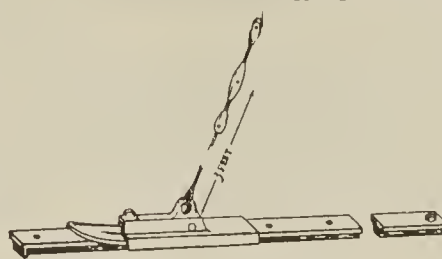


Fig. No. 10 1 Rhody Runner Type B

The backstays are fastened to self-locking slides which run on tracks either side of the cockpit near the rail. The slides have a latch which drops over the end of the track, locking it in position. Tension in the stay is adjusted by turnbuckles spliced into the stay.

Per Pair

Type B—Weight, 14 Lbs.\$20.00

Lifting Lugs

Galvanized cast iron plates with loop for shackle or hook. These plates fit over the keel bolts at each end of the keel.



Fig. No. 11A

Each

No. 11A\$2.00

Bow Plate and Chocks

This fitting provides an excellent chock for towing as the rope cannot lift out. It also makes a good finish for the bow and protects the stem.

Made of cast bronze.

Each

No. 12A\$3.00

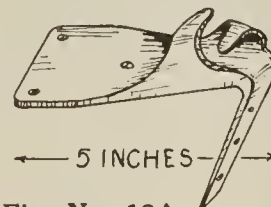


Fig. No. 12A

DECK TURNBUCKLES

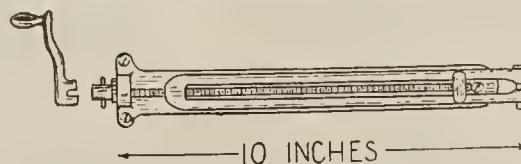


Fig. No. 13

For adjusting fore and jib stays. Can be used either screwed to the deck or mounted on frame beneath deck for operating jib and lead stays. Also convenient for adjusting rake and mast curvature for balance or weather conditions. Made of cast bronze.

Each

No. 13—Weight, 1½ Lbs.\$5.00
Mounting Brackets for Above..... 1.50

GOOSENECKS

CAST BRONZE

Permits sail to be held closer to the mast. Provision is made for an adjustment of ⅝ inch for the sail cringle. An important feature when using full draft on new sails.

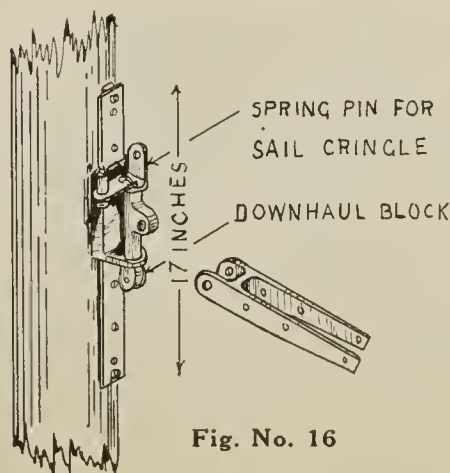


Fig. No. 16

Each

No. 16\$8.00



STAR CLASS HARDWARE

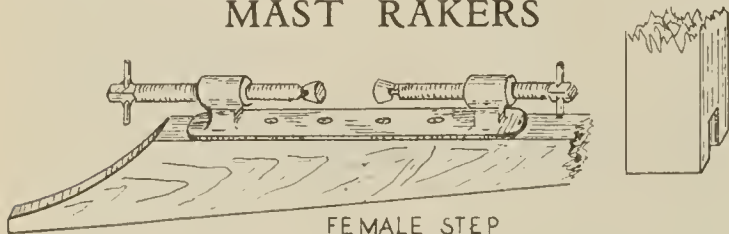


ALUMINUM SHEAVES

With brass pin and housing for wire main halyard. Makes a very strong and light method of reaving the main halyard through the mast head.

No. 17A—Weight Each, 3 Ounces **\$1.50** Each

MAST RAKERS



FEMALE STEP

Fig. No. 18

CAST BRONZE

Made in two styles, male and female. Male step has two screws, one forward and one aft of mast. May be used with either round or square masts. Plain finish.

No. 18—Male or Female **\$8.00** Per Pair

OUTHAUL SLIDE

CAST BRONZE



Has a hinged side which is held in the locked position by an easily operated spring pin. No projecting parts to catch ropes on. Used with No. 22. Made of cast bronze. Polished.

No. 411—For 5/8-inch Sail Track **\$2.50** Each

OUTHAUL

CAST BRONZE

Consists of a No. 21 slide, bronze block with flange for end of boom and a length of stainless steel wire spliced to slide and weaved through block on boom. Made of cast bronze.

Nos. 21 and 22A—For 5/8-inch Track **\$8.00** Each

HEAD AND JIBSTAY FITTINGS

CAST BRONZE

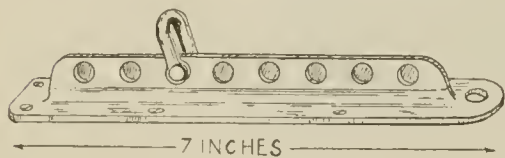


Fig. No. 23

class rules may be easily made. Made of cast bronze.

No. 23 **\$2.00** Each

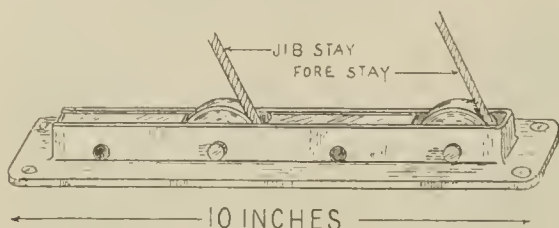


Fig. No. 23A

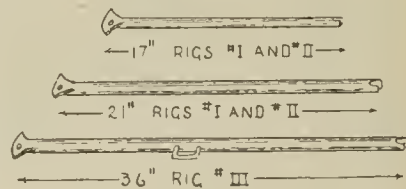
CAST BRONZE

Fitting for carrying stays beneath deck where they may be easily adjusted with crank turnbuckle. Several holes are provided so that the sheaves may be shifted as permitted by star class rules. The opening between the sheaves is closed by brass slides to keep out water. Made of cast bronze.

No. 23A **\$6.00** Each

TUBULAR SPREADERS

These spreaders are made of galvanized seamless tubular steel, welded into shape at both ends. Exceptionally strong and light.



Per Pair

No. 1—Upper Spreader, Complete with Plates, 1/2 x17 Inches; Weight per Pair, 9 Ounces..... **\$6.50**

No. 2—Lower Spreader, Complete with Plates, 5/8 x21 Inches; Weight per Pair, 1 Lb. **7.50**

No. 3—With Steel Eye for Intermediate Shroud, 3/4x36 Inches; Weight per Pair, 1 1/2 Lbs. **8.50**

Extra Spreader Plates **\$.70** Each

STAR CLASS ROLLER BOOM

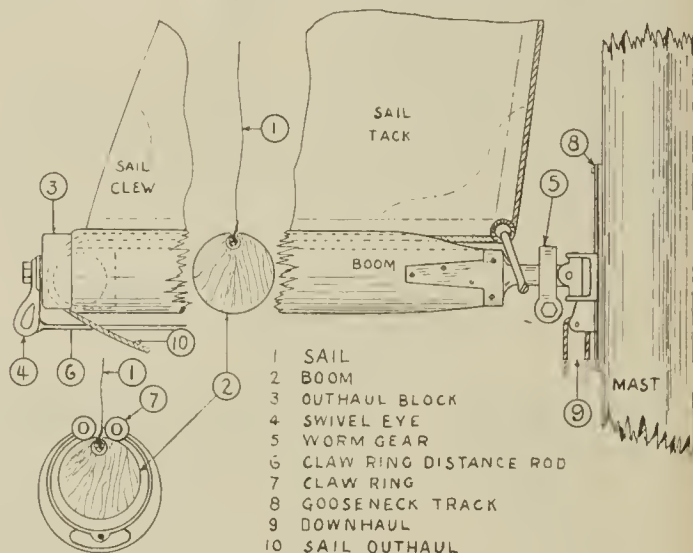


Fig. No. 51

This boom complies with the Star Class specifications, and has been used during the past season in International races with good success. Reefing is accomplished by operating the reefing lever which rolls the sail about the boom. Simple to operate and install. Special sails not required. Small alterations to Standard sails are the only changes necessary.

Complete outfit consists of boom, gooseneck and reefing mechanism, claw ring and blocks. Bronze hardware, selected spruce boom **\$50.00** Per Set

MAST PLATES

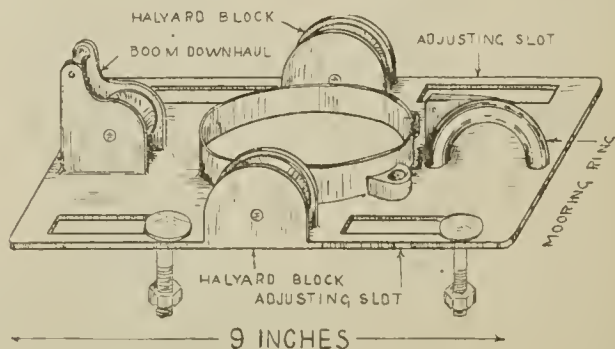


Fig. No. 53

CAST BRONZE

This is a combination of Nos. 14-15-19-47. Made of cast bronze, plain finish.

No. 53—Complete **\$10.00** Each



STAR CLASS HARDWARE



WHISKER POLE FITTINGS

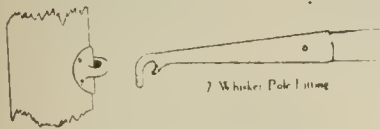


Fig. No. 54

angle; is not dislodged by the swash of passing boats. Polished bronze.

No. 54—Weight Each, $\frac{5}{8}$ Lb. \$2.00

CAST BRONZE

Has a special shaped hook so that it will not jump out of the mast fittings, yet it is easily removable. Adjusts itself to almost any

Each

AUTOMATIC JAM CLEATS

CAST BRONZE

An automatic jam cleat which may be operated at some distance from the operator. Has an exceptionally strong grip and is excellent for light weights since no effort is necessary to make fast the rope. Has guide for leading rope. Made of bronze.

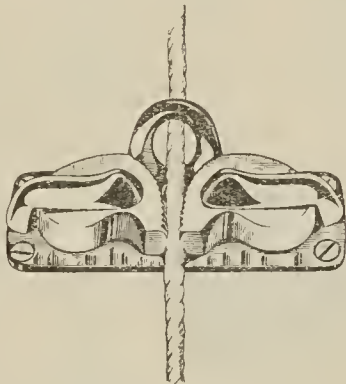
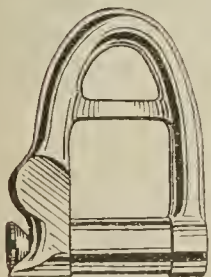


Fig. No. 55

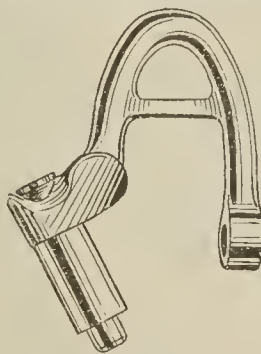
Each

No. 403—Up to $\frac{1}{2}$ " Rope \$4.50
 No. 55—Up to $\frac{1}{8}$ " Rope 2.50
 No. 56—Up to $\frac{7}{8}$ " Rope 2.50
 No. 57—Up to $\frac{1}{8}$ " Rope 2.50

HEADBOARD SNAP SHACKLES



Closed



Open

Fig. No. 56

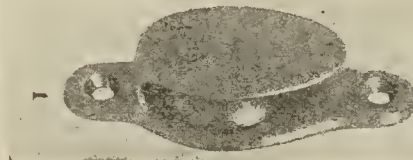
These shackles are designed for use with Marconi sail headboards. They have no loose parts which may be lost. Also useful for jib halyard and jib clew. The cut shows the shackle in both open and closed positions. Made of cast bronze—polished.

Each

No. 1 \$1.25
 No. 2 1.75

TIEBOUT Service means the rallying of all our force to the ultimate use of our customers. This organization consists of men and women of high calibre, compatible in every way with the class of service our customers have a right to demand—to be served promptly, fairly and efficiently.

SNATCH BLOCKS



Fair lead blocks for trimming main or jib sheet across the deck or cock-pit. Invaluable for playing the main and jib sheet in heavy weather as it allows the crew to re-

main to windward. Polished bronze.

Each

No. 57—Weight Each, 3 Ounces \$1.50

JIB SHEET BLOCKS

Very light bullet type blocks for use with two part jib sheets. Will not weigh down the clew of the sail in light air.



Each

No. 58—Weight Each, 2 Ounces \$1.00

BULLET BLOCKS

REGULAR—BRONZE—No. 1009

Cast brass; polished finish; a strong and serviceable small block used on topping lifts, lazy jacks and leaders; with eye to splice.



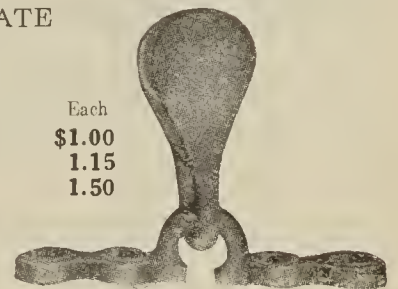
| Nos. | Diam. Size Rope | Each |
|------|-----------------|--------|
| 0 | $\frac{5}{16}$ | \$0.50 |
| 1 | $\frac{3}{16}$ | .65 |
| 2 | $\frac{7}{16}$ | .75 |
| 3 | $\frac{1}{2}$ | 1.00 |

WITH DECK PLATE

For use with leaders.

No. 364

| Nos. | Size Rope | Each |
|------|--------------------------------------|--------|
| 1 | 9 or 12 Thread | \$1.00 |
| 2 | 12 or 15 Thread | 1.15 |
| 3 | $\frac{1}{16}$ or $\frac{1}{2}$ Inch | 1.50 |



SPRING PIN SHACKLE

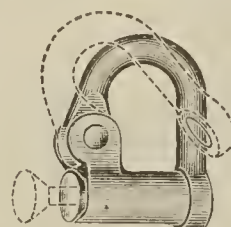


Fig. B-11001

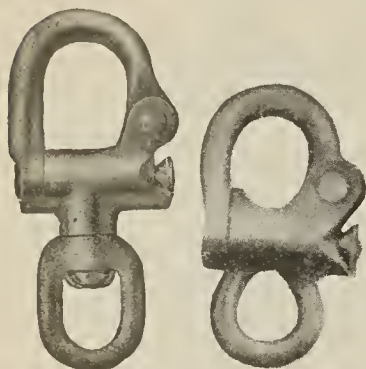
MANGANESE BRONZE

For main halyard to fit headboards. A short, strong, quick to operate Shackle with no loose parts.

| Size Nos. | Size, Inches | Width Opening, Inches | Price, Each Plain Bronze |
|-----------|----------------|-----------------------|--------------------------|
| 1 | $\frac{1}{4}$ | $\frac{3}{4}$ | \$1.00 |
| 2 | $\frac{5}{16}$ | $\frac{7}{8}$ | 1.25 |

Larger Sizes, Price on Application

SNAP SHACKLES



No. 391

No. 392

BRONZE

For use with jib and spinnaker halyards. Made of cast bronze, highly polished finish. Takes the place of Coleman hooks and is quicker and stronger. As strong as a shackle and as quick as a hook.

No. 392—Stiff Eye

No. 391—Swivel Eye

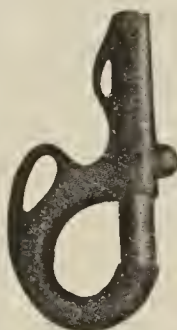
| Size, Nos. | Suitable Diameter Rope, Inch | Suitable Size Block, Inches | No. 392 Plain, Each | No. 391 Plain, Each |
|------------|------------------------------|-----------------------------|---------------------|---------------------|
| 1 | $\frac{3}{8}$ | 2 $\frac{1}{2}$ or 3 | \$1.15 | \$2.00 |
| 2 | $\frac{1}{2}$ | 3 $\frac{1}{2}$ or 4 | 1.50 | 2.75 |
| 3 | $\frac{5}{8}$ | 4 $\frac{1}{2}$ or 5 | 2.00 | 3.50 |
| 4 | $\frac{3}{4}$ | 6 | 3.25 | 6.00 |
| 5 | $\frac{7}{8}$ | 7 | 7.00 | 12.50 |

SAIL SNAP HOOKS

No. 394

Used with jibs. Brings sail close to the stay. Does not foul other sails or ropes. Made entirely of bronze; polished finish.

| Nos. | Size Stay, Inch | Size Opening, Inch | Each |
|------|-----------------|--------------------|--------|
| 0 | $\frac{1}{8}$ | $\frac{1}{4}$ | \$0.40 |
| 1 | $\frac{1}{4}$ | $\frac{3}{8}$ | .40 |
| 2 | $\frac{3}{8}$ | $\frac{1}{2}$ | .60 |
| 3 | $\frac{1}{2}$ | $\frac{5}{8}$ | .75 |
| 4 | $\frac{5}{8}$ | $\frac{3}{4}$ | 1.00 |

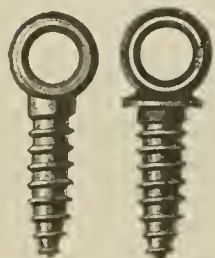


CLEW OUTHAUL SLIDE BLOCKS



Polished cast bronze. A short piece of drilled track as illustrated is supplied for the outer end of the boom. Sizes Nos. 1 and 2, have a groove for wire instead of a sheave. Size No. 1 track is rolled bronze, all other sizes are cast solid.

| Size, Nos. | For Area of Sail, Square Feet | Size Track, Inches | Each |
|------------|-------------------------------|--------------------|--------|
| 1 | 125 | $\frac{5}{8}$ | \$2.25 |
| 2 | 300 | $\frac{3}{4}$ | 3.50 |
| 3 | 500 | $\frac{7}{8}$ | 6.50 |
| 4 | 800 | 1 | 8.50 |
| 5 | 1200 | 1 $\frac{1}{4}$ | 13.00 |



LACING EYES

No. 6157—WITHOUT SHOULDER

No. 6159—WITH SHOULDER

Malleable iron, hot galvanized or plain cast brass.

| Size, Nos. | Diameter Eye, Inch | Length Under Eye, Inches | Length Under Shoulder, Inches | Galvanized | Brass |
|------------|--------------------|--------------------------|-------------------------------|------------|--------|
| 1 | $\frac{1}{4}$ | 1 | 1 | \$0.04 | \$0.05 |
| 2 | $\frac{5}{16}$ | 1 $\frac{1}{8}$ | 1 | .05 | .08 |
| 3 | $\frac{7}{16}$ | 1 $\frac{1}{2}$ | 1 | .07 | .10 |
| 4 | $\frac{9}{16}$ | 2 | 1 $\frac{3}{4}$ | .14 | .12 |

FLANGE EYES



Used with yacht blocks, tiller lines and for fenders, etc.

| Size, Nos. | Opening, Inch | Size Base, Inches | Plain | Polished |
|------------|---------------|----------------------------------|--------|----------|
| 1 | $\frac{5}{8}$ | 2 $\frac{1}{8}$ x1 | \$0.14 | \$0.30 |
| 2 | $\frac{3}{4}$ | 2 $\frac{1}{2}$ x1 $\frac{1}{4}$ | .16 | .35 |

LIP LEADERS

Used largely for guiding tiller or whistle signal lines.

Made of bronze; has a large funneled opening; holes for countersunk wood screws; plain or polished finish.



| Size, Nos. | Size Small Opening, Inch | Size Base, Inches | Weight per Hundred, Lbs. | Plain | Polished |
|------------|--------------------------|----------------------------------|--------------------------|--------|----------|
| 1 | $\frac{1}{2}$ | 2 x1 | 7 $\frac{1}{4}$ | \$0.15 | \$0.30 |
| 2 | $\frac{7}{8}$ | 2 $\frac{1}{8}$ x1 $\frac{1}{4}$ | 15 $\frac{3}{4}$ | .20 | .40 |

DECK STRAPS



MANGANESE BRONZE

Figs. B-5950—P-5950

FOR ATTACHING BLOCKS TO DECK, MAST OR BOOM

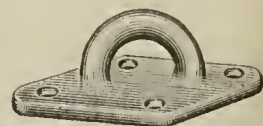
| Size, Nos. | Opening, Inches | Diam. of Base, Inches | Counter-sunk for Screw, Nos. | Price, Each |
|------------|-----------------|-----------------------------------|------------------------------|---|
| 1 | $\frac{1}{2}$ | 3 $\frac{3}{4}$ x $\frac{3}{4}$ | 10 | Plain Bronze \$0.40, Polished Bronze \$0.50 |
| 2 | $\frac{9}{16}$ | 4 $\frac{1}{4}$ x $\frac{3}{4}$ | 12 | .50, .60 |
| 3 | $\frac{5}{8}$ | 4 $\frac{3}{4}$ x $\frac{13}{16}$ | 12 | .60, .75 |

PAD EYES

MANGANESE BRONZE

These are generally used with Blocks shown on page 80-81.

Fig. B-11002



| Size, Nos. | Suitable for Size Shackle | Price, Each |
|------------|---------------------------|------------------------------|
| 1 | $\frac{3}{8}$ | Single \$0.75, Double \$0.75 |
| 2 | $\frac{7}{16}$ | 1.00, 1.50 |

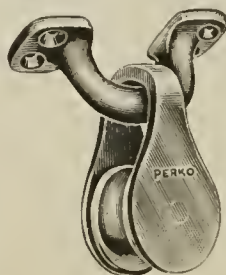
Cut shows single Pad Eye, for one Shackle.

Double Pad Eye has oval eye, for two Shackles.

TILLER ROPE PULLEY

WITH FLANGE EYE—CAST BRONZE

Pulley hangs loose on flange eye and can be used at any angle. Cast bronze body, brass wheel turned from rod, no rough surface to wear tiller rope.



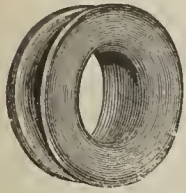
| For Rope Diam., Inches | Length Pulley, Inches | Size Wheel, Inches | Size Base of Strap, Inches |
|------------------------|-----------------------|--------------------|----------------------------|
| $\frac{5}{16}$ | 1 $\frac{3}{4}$ | 1 x $\frac{1}{2}$ | $\frac{3}{4}$ x 2 |

PRICE EACH

| Plain Bronze | Polished Bronze | Nickel Plated | Chromium Plated |
|--------------|-----------------|---------------|-----------------|
| \$0.70 | \$0.75 | \$1.15 | \$1.95 |

Fig. 579

BULL'S EYES OR LIZARDS



LIGNUM-VITAE

Turned from lignum-vitae and polished.
Regular dimensions for sailmakers' use.

| Outside Diameter, Inches | Thickness, Inches | Diameter Hole, Inches | Score Width, Inches | Score Depth, Inch | Each |
|--------------------------|-------------------|-----------------------|---------------------|-------------------|--------|
| 1 | $\frac{5}{8}$ | $\frac{3}{8}$ | $\frac{1}{4}$ | $\frac{1}{8}$ | \$0.27 |
| $1\frac{1}{4}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{1}{8}$ | .30 |
| $1\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{5}{8}$ | $\frac{3}{8}$ | $\frac{1}{8}$ | .33 |
| $1\frac{3}{4}$ | 1 | $\frac{3}{4}$ | $\frac{1}{2}$ | $\frac{1}{8}$ | .38 |
| 2 | $1\frac{1}{8}$ | $\frac{7}{8}$ | $\frac{1}{2}$ | $\frac{1}{8}$ | .45 |
| $2\frac{1}{4}$ | $1\frac{1}{4}$ | $\frac{7}{8}$ | $\frac{5}{8}$ | $\frac{1}{4}$ | .50 |
| $2\frac{1}{2}$ | $1\frac{3}{8}$ | 1 | $\frac{5}{8}$ | $\frac{1}{4}$ | .60 |
| $2\frac{3}{4}$ | $1\frac{3}{8}$ | $1\frac{1}{8}$ | $\frac{5}{8}$ | $\frac{1}{4}$ | .70 |
| 3 | $1\frac{1}{2}$ | $1\frac{1}{4}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .85 |
| $3\frac{1}{4}$ | $1\frac{5}{8}$ | $1\frac{1}{4}$ | $\frac{7}{8}$ | $\frac{1}{8}$ | .95 |
| $3\frac{1}{2}$ | $1\frac{3}{4}$ | $1\frac{3}{8}$ | 1 | $\frac{1}{8}$ | 1.05 |
| $3\frac{3}{4}$ | $1\frac{7}{8}$ | $1\frac{3}{8}$ | 1 | $\frac{1}{8}$ | 1.15 |
| 4 | 2 | $1\frac{1}{2}$ | $1\frac{1}{8}$ | $\frac{3}{8}$ | 1.30 |
| $4\frac{1}{4}$ | $2\frac{1}{8}$ | $1\frac{1}{2}$ | $1\frac{1}{8}$ | $\frac{3}{8}$ | 1.60 |
| $4\frac{1}{2}$ | $2\frac{1}{4}$ | $1\frac{5}{8}$ | $1\frac{1}{4}$ | $\frac{7}{8}$ | 1.70 |
| 5 | $2\frac{1}{2}$ | $1\frac{3}{4}$ | $1\frac{3}{8}$ | $\frac{1}{8}$ | 2.30 |

PARREL TRUCKS

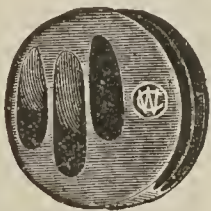
LIGNUM-VITAE

Turned and polished; used principally with mast hoops.

| Diameter, Inches | For Dozen | Diameter, Inches | Per Dozen | Diameter, Inches | Per Dozen |
|------------------|-----------|------------------|-----------|------------------|-----------|
| $\frac{5}{8}$ | \$0.80 | $1\frac{1}{2}$ | \$1.70 | $2\frac{3}{4}$ | \$6.46 |
| $\frac{3}{4}$ | .90 | $1\frac{3}{4}$ | 2.46 | 3 | 7.46 |
| $\frac{7}{8}$ | 1.00 | 2 | 3.46 | $3\frac{1}{4}$ | 8.46 |
| 1 | 1.10 | $2\frac{1}{4}$ | 4.46 | $3\frac{1}{2}$ | 9.46 |
| $1\frac{1}{4}$ | 1.30 | $2\frac{1}{2}$ | 5.46 | 4 | 10.46 |



Upper for Rope Strap



Lower for Iron Strap

DEAD EYES

LIGNUM-VITAE

Turned and polished. In ordering state. Made for manila and wire rope shrouds or stays.

| Diameter, Inches | Each | Diameter, Inches | Each | Diameter, Inches | Each |
|------------------|--------|------------------|--------|------------------|--------|
| 2 | \$1.35 | 4 | \$1.80 | 6 | \$3.60 |
| $2\frac{1}{2}$ | 1.35 | $4\frac{1}{2}$ | 2.30 | $6\frac{1}{2}$ | 4.10 |
| 3 | 1.35 | 5 | 2.70 | 7 | 5.00 |
| $3\frac{1}{2}$ | 1.55 | $5\frac{1}{2}$ | 3.20 | 8 | 7.25 |

CHAIN PLATES



GALVANIZED IRON—WITH DEAD EYES

With lignum-vitae dead eyes; heavy galvanized pin.

Style 629

| Nos. | Size of Head Eye, Inches | Size of Iron, Inches | Length from Hinge to End, Inches | Number of Holes | Size of Holes, Inches | Each |
|------|--------------------------|-----------------------------------|----------------------------------|-----------------|-----------------------|--------|
| 1 | 2 | $1 \times \frac{3}{8}$ | 12 | 2 | $\frac{5}{8}$ | \$6.75 |
| 2 | $2\frac{1}{2}$ | $1\frac{1}{4} \times \frac{3}{8}$ | $15\frac{1}{2}$ | 2 | $\frac{3}{8}$ | 7.00 |
| 3 | 3 | $1\frac{1}{2} \times \frac{1}{4}$ | 18 | 2 | $\frac{7}{8}$ | 7.75 |
| 4 | $3\frac{1}{2}$ | $1\frac{3}{4} \times \frac{1}{4}$ | 21 | 2 | $\frac{9}{8}$ | 9.75 |
| 5 | 4 | $2 \times \frac{1}{8}$ | 24 | 2 | $\frac{1}{8}$ | 11.50 |
| 6 | $4\frac{1}{2}$ | $2 \times \frac{3}{8}$ | 27 | 2 | $\frac{5}{8}$ | 16.00 |
| 7 | 5 | $2\frac{1}{4} \times \frac{3}{8}$ | 30 | 2 | $\frac{5}{8}$ | 18.50 |

CHAIN PLATES

GALVANIZED IRON
No. 6241

Used with turnbuckles or dead eyes when fastening shrouds.



| Length, Inches | Size of Iron, Inches | Size of Eye, Inches | Weight Each, Lbs. | Each |
|----------------|------------------------------------|---------------------|-------------------|--------|
| 4 | $\frac{7}{8} \times \frac{3}{16}$ | $\frac{9}{16}$ | $\frac{1}{4}$ | \$0.38 |
| 5 | $1 \times \frac{3}{16}$ | $\frac{11}{16}$ | $\frac{5}{16}$ | .43 |
| 6 | $1 \times \frac{1}{4}$ | $\frac{3}{4}$ | $\frac{7}{16}$ | .55 |
| 8 | $1\frac{1}{8} \times \frac{1}{4}$ | $\frac{13}{16}$ | $\frac{3}{4}$ | .65 |
| 10 | $1\frac{1}{4} \times \frac{1}{4}$ | $\frac{15}{16}$ | 1 | .85 |
| 12 | $1\frac{1}{2} \times \frac{1}{4}$ | $\frac{15}{16}$ | $1\frac{3}{8}$ | 1.10 |
| 14 | $1\frac{1}{2} \times \frac{5}{16}$ | 1 | $2\frac{1}{4}$ | 1.35 |

FOOT ROPE PLATES

No. 6239

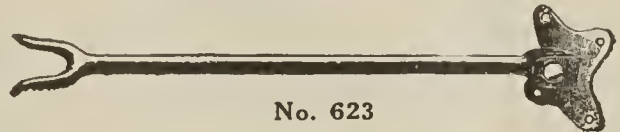
GALVANIZED IRON

Reversed eye; for foot ropes or for shrouds when shackles are used; measured from under eye to end.



| Length, Inches | Size of Iron, Inches | Size of Eye, Inches | Weight Each, Lbs. | Each |
|----------------|------------------------------------|---------------------|-------------------|--------|
| 3 | $\frac{3}{4} \times \frac{1}{4}$ | $\frac{1}{2}$ | $\frac{3}{16}$ | \$0.70 |
| 4 | $\frac{3}{4} \times \frac{1}{4}$ | $\frac{9}{16}$ | $\frac{4}{16}$ | .80 |
| 5 | $\frac{7}{8} \times \frac{5}{16}$ | $\frac{3}{4}$ | $\frac{7}{16}$ | .95 |
| 6 | $1 \times \frac{5}{16}$ | $\frac{7}{8}$ | $\frac{9}{16}$ | 1.10 |
| 8 | $1\frac{1}{4} \times \frac{5}{16}$ | 1 | 1 | 1.35 |
| 10 | $1\frac{1}{2} \times \frac{3}{8}$ | $1\frac{1}{8}$ | $1\frac{1}{2}$ | 1.60 |

SPREADERS



No. 623

For spreading shrouds and head-stays on small sailing craft. Bronze plate to screw on mast, the arm is made of steel, galvanized.

| Length of Arm, Inches | Diam. of Arm, Inch | Wgt. Each, Lbs. | Each | Length of Arm, Inches | Diam. of Arm, Inch | Wgt. Each, Lbs. | Each |
|-----------------------|--------------------|-----------------|--------|-----------------------|--------------------|-----------------|--------|
| 8 | $\frac{3}{8}$ | $\frac{3}{8}$ | \$3.80 | 14 | $\frac{1}{2}$ | $1\frac{5}{16}$ | \$6.00 |
| 9 | $\frac{3}{8}$ | $\frac{1}{2}$ | 3.50 | 16 | $\frac{5}{8}$ | $2\frac{3}{4}$ | 7.00 |
| 10 | $\frac{3}{8}$ | $\frac{5}{8}$ | 3.50 | 18 | $\frac{5}{8}$ | 3 | 7.50 |
| 12 | $\frac{1}{2}$ | $1\frac{1}{8}$ | 4.50 | 20 | $\frac{5}{8}$ | $3\frac{1}{8}$ | 7.50 |

SHEET TRAVELERS



WITH SCREW PLATES

Fastens to after deck and carries the lower mainsheet block. With round plates; polished, wrought brass or galvanized iron.

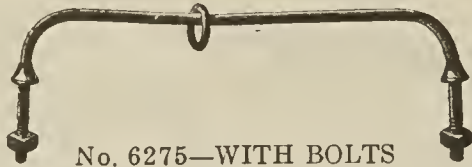
| Diameter of Rod, Inch | Length of Rod, Inches | Height Between Deck and Traveler, Inches | Polished Brass | Galvanized |
|-----------------------|-----------------------|--|----------------|------------|
| $\frac{3}{8}$ | 12 | $1\frac{1}{2}$ | \$ | \$ |
| $\frac{3}{8}$ | 18 | $1\frac{1}{2}$ | | |
| $\frac{1}{2}$ | 15 | 2 | | |
| $\frac{1}{2}$ | 18 | 2 | | |
| $\frac{1}{2}$ | 24 | 2 | | |
| $\frac{1}{2}$ | 30 | 2 | | |
| $\frac{5}{8}$ | 18 | 2 | | |
| $\frac{5}{8}$ | 24 | 2 | | |
| $\frac{5}{8}$ | 30 | 2 | | |
| $\frac{5}{8}$ | 36 | 2 | | |
| $\frac{3}{4}$ | 30 | $2\frac{1}{2}$ | | |
| $\frac{3}{4}$ | 36 | $2\frac{1}{2}$ | | |

Prices Upon Application

HOT DIPPED GALVANIZING

A coating of zinc, applied by the hot process to iron and steel, will give a great many years' hard service.

DECK TRAVELERS



No. 6275—WITH BOLTS

With bolt and nuts for fastening through deck, has shoulder for resting on deck. Polished brass and galvanized iron.

| Diameter of Rod, Inch | Length of Rod, Inches | Height Between Deck and Traveler, Inches | Polished Brass | Each | Galvanized |
|-----------------------|-----------------------|--|----------------|------|------------|
| 3/8 | 12 | 1 1/2 | \$.... | | \$.... |
| 3/8 | 18 | 1 1/2 | .... |  | .... |
| 1/2 | 12 | 2 | .... |  | .... |
| 1/2 | 18 | 2 | .... |  | .... |
| 1/2 | 24 | 2 | .... |  | .... |
| 1/2 | 30 | 2 | .... |  | .... |
| 5/8 | 18 | 2 | .... |  | .... |
| 5/8 | 24 | 2 | .... |  | .... |
| 5/8 | 30 | 2 | .... |  | .... |
| 5/8 | 36 | 2 | .... |  | .... |
| 3/4 | 30 | 2 1/2 | .... |  | .... |
| 3/4 | 36 | 2 1/2 | .... |  | .... |

Prices Upon Application

WOOD MAST HOOPS



Made from a selected grade of hardwood. Furnished copper riveted or unriveted with rivets or with forelocks on larger sizes.

Dimensions specified are inside diameters.

YACHT TYPE

Sizes, 3 to 24 Inch Per Inch \$0.07

COMMERCIAL TYPE

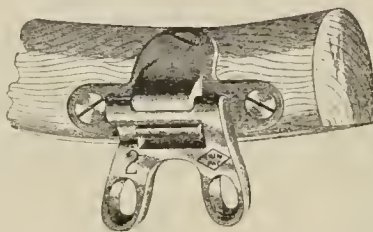
| Size, Inches | Per Inch |
|--------------|------------|
| 6 to 23 | \$0.04 1/2 |
| 24 to 27 | .05 |
| 28 to 30 | .05 1/2 |
| 31 to 34 | .06 1/2 |

Note: For varnishing, add \$0.01 per inch to above prices.

SAIL FASTENERS

TRIM

A simple device doing away with all annoyance in bending and unbending sails to mast hoops or sail hoists. Made in two parts of tough non-corrosive bronze. Very strong as size No. 2 was tested to withstand a 1200 lb. strain.



| Nos. | For Hoop, Inches | For Rope, Inch | Weight Each, Lbs. | Each | Extra Links, Each |
|------|------------------|----------------|-------------------|--------|-------------------|
| 0 | 3 to 5 | 1/4 or 3/8 | 1 1/8 | \$0.70 | \$0.30 |
| 1 | 6 to 8 | 1/2 | 1 1/8 | .90 | .35 |
| 2 | 9 to 11 | 3/4 | 1 1/8 | 1.05 | .50 |
| 2A | 12 to 14 | 1 | 1 1/8 | 1.20 | .50 |

MAST TRACK

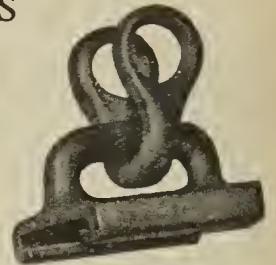
No. 214A

For Marconi rigged sail or ice yachts. Used with sail slides, it permits instant dropping of main sail or quick changing of sails for racing. Obviates use of mast hoops. Is fastened directly to the mast. Flat track is bronze, channel track nickel silver. Bronze track is notched at the ends and is drilled for screws. Furnished in 10 and 12 foot lengths.



| Size, Inches | Nickel, Per Foot | Size, Inches | Bronze, Per Foot |
|--------------|------------------|--------------|------------------|
| 5/8 | \$0.18 | 1 x 1/8 | \$0.45 |
| 7/8 | .25 | 1 1/4 x 1/8 | .55 |
| 1 | .40 | 1 1/2 x 1/8 | .85 |
| 1 1/4 | .50 | 2 x 1/4 | 1.50 |
| 1 1/2 | .75 | | |

SAIL SLIDES

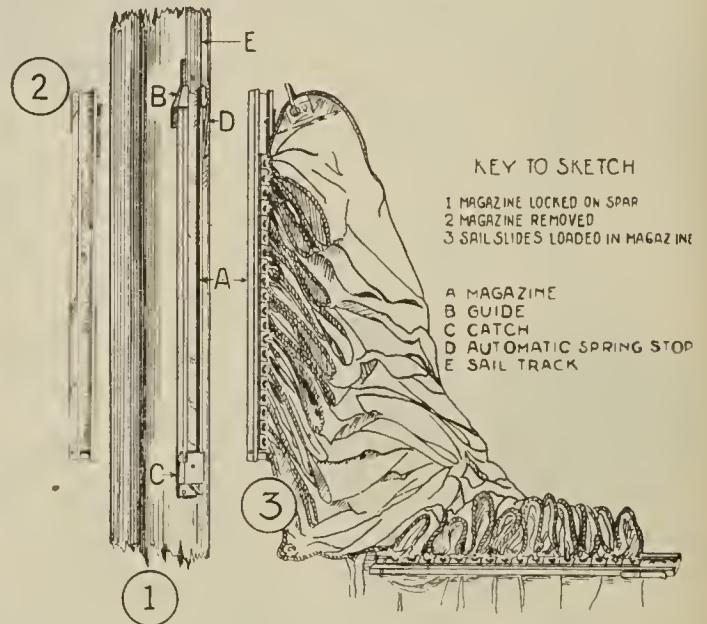
No. 404
RegularNo. 407
Screw PatternNo. 408
Link Pattern

The No. 214 slide can be furnished on order, with a small thimble in the eye to which the sail is sewed. This gives greater flexibility and prevents cutting the thread. Made of non-corrosive nickel silver.

The No. 215 slide is made with a screw pin and is commonly used on the foot of a sail. The No. 216 slide is fitted with a short ring and shackle and is used on the hoist.

| Size Track, Inches | No. 404, Each | No. 407, Each | No. 408, Each |
|--------------------|---------------|---------------|---------------|
| 5/8 | \$0.07 | .... | .... |
| 7/8 | .11 | \$0.65 | .... |
| 1 | .17 | .75 | \$0.70 |
| 1 1/4 | .... | 1.00 | .90 |
| 1 1/2 | .... | 1.25 | 1.00 |
| 1 x 1/8 | .... | .75 | .90 |
| 1 1/4 x 1/8 | .... | 1.00 | .90 |
| 1 1/2 x 1/8 | .... | 1.25 | 1.00 |
| 2 x 1/4 | .... | 1.75 | 1.50 |

SAIL SLIDE MAGAZINES



KEY TO SKETCH

- 1 MAGAZINE LOCKED ON SPAR
2 MAGAZINE REMOVED
3 SAIL SLIDES LOADED IN MAGAZINE

- A MAGAZINE
B GUIDE
C CATCH
D AUTOMATIC SPRING STOP
E SAIL TRACK

For use on sailboats up to Class R using 5/8 inch sail track. Permits changing sail in thirty seconds. Avoids the usual task of spreading out sail, finding headboard and threading in slides. The device consists of a magazine which is secured to the lower part of the mast and to the inboard end of the boom. The magazines hold the slides as they come down the mast track in lowering the sail and also as they are pulled off the boom track. A catch secured to bolt rope when snapped permits magazines holding sails to be removed. The magazines hold the slides in proper relation so that they are ready to be put back quickly on the mast and boom at any time. When sails are on magazines they can be hung or laid anywhere to air and dry. Magazines are easily and quickly attached to any kind of spar. Made in bronze in two sizes. Each set contains two magazines, one for boom and one for mast and the necessary fittings for securing them. Magazines stow in sail bag easily.

| | Per Set |
|---|---------|
| No. 1—Holds 22 Slides; Weight per Set, 3 1/4 Lbs... | \$10.00 |
| No. 2—Holds 28 Slides..... | 11.00 |
| EXTRA MAGAZINE | |
| No. 1 | \$2.50 |
| No. 2 | 3.00 |

MAST WITHEs



One Eye



Two Eyes



Three Eyes



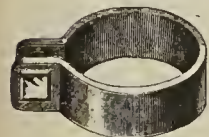
Four Eyes

Used where an eye is wanted on a spar to take a rope or block. Large sizes used on derricks; drop forged and galvanized.

| Inside Diam., Inches | One Eye | Two Eyes | Three Eyes | Four Eyes |
|----------------------|---------|----------|------------|-----------|
| 1 1/4 | \$0.90 | \$0.90 | \$1.50 | \$1.50 |
| 1 1/2 | .95 | .95 | 1.55 | 1.55 |
| 1 3/4 | 1.00 | 1.00 | 1.65 | 1.65 |
| 2 | 1.10 | 1.10 | 1.80 | 1.80 |
| 2 1/4 | 1.25 | 1.25 | 2.00 | 2.00 |
| 2 1/2 | 1.40 | 1.40 | 2.20 | 2.20 |
| 3 | 1.55 | 1.55 | 2.40 | 2.40 |
| 3 1/2 | 1.70 | 1.70 | 2.60 | 2.60 |
| 4 | 1.85 | 1.85 | 2.80 | 2.80 |
| 4 1/2 | 2.10 | 2.10 | 3.00 | 3.00 |

ADJUSTABLE GAFF BANDS

No. 6253



Galvanized iron with square head bolt. Used to fasten halyards to the gaff when a close connection is wanted. Bolt passes through eye of the halyard block.

| Inside Diam., Inches | Each | Inside Diam., Inches | Each |
|----------------------|--------|----------------------|--------|
| 2 | \$.... | 3 3/4 | \$.... |
| 2 1/4 | | 4 | .... |
| 2 1/2 | | 4 1/2 | .... |
| 2 3/4 | | 5 | .... |
| 3 | | 5 1/2 | .... |
| 3 1/4 | | 6 | .... |
| 3 1/2 | | | |

Prices on Application

BOOM BANDS

No. 6255—REGULAR

Galvanized iron with traveler. Used to attach the main sheet block to the boom.

| Inside Diam., Inches | Each | Inside Diam., Inches | Each |
|----------------------|--------|----------------------|--------|
| 1 3/4 | \$.... | 3 | \$.... |
| 2 | | 3 1/2 | .... |
| 2 1/2 | | 4 | .... |
| 2 3/4 | | 4 1/2 | .... |

Prices on Application

ADJUSTABLE BOOM BANDS

No. 6257—ADJUSTABLE



Galvanized iron with traveler. Used to attach the main sheet block to the boom.

| Inside Diam., Inches | Each | Inside Diam., Inches | Each |
|----------------------|--------|----------------------|--------|
| 2 1/2 | \$6.00 | 4 1/2 | \$8.75 |
| 3 | 6.75 | 5 | 9.50 |
| 3 1/2 | 7.25 | 5 1/2 | 10.50 |
| 4 | 7.75 | 6 | 11.50 |

GOOSE NECK BANDS



SWIVEL SCREW HOOK AND EYE
No. 645

Made of wrought iron galvanized.

Has slot in swivel

pin for spring cotter to prevent band from dropping off.

Furnished plain as illustrated, also with shackle attached on swivel joint.

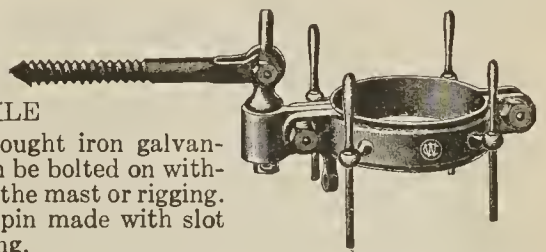
| Inside Diam., Ins. | Length of Hook, Inches | Each Plain |
|--------------------|------------------------|------------|
| 2 1/2 | 5 | \$4.70 |
| 3 | 5 1/2 | 4.70 |
| 3 1/2 | 6 | 5.00 |
| 4 | 6 1/2 | 5.50 |
| 4 1/2 | 6 3/4 | .... |
| 5 | 8 | .... |
| 5 1/2 | 8 | .... |
| 6 | 7 1/2 | .... |

Note—Sizes on application.

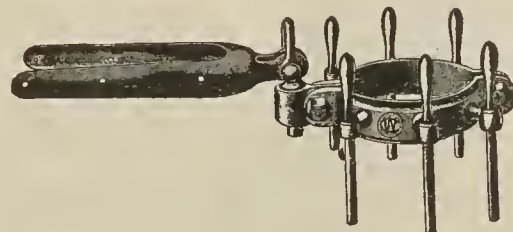
WITH
SCREW
PIN

AND SHACKLE

Made of wrought iron galvanized; band can be bolted on without disturbing the mast or rigging. Swivel socket pin made with slot for cotter spring.



| Diameter of Band, Inches | Diameter Screw, Inch | Diameter Belaying Pin Hole, Inch | Each, With Four Pin Holes | Each With Six Pin Holes |
|--------------------------|----------------------|----------------------------------|---------------------------|-------------------------|
| 3 | 7/8 | 3/8 | \$11.00 | .... |
| 3 1/2 | 1 1/8 | 3/8 | 11.50 | .... |
| 4 | 1 1/2 | 3/8 | 12.00 | .... |
| 4 1/2 | 1 1/2 | 3/8 | 13.00 | .... |
| 5 | 5/8 | 3/8 | 15.00 | \$16.00 |
| 6 | 5/8 | 7/8 | 17.00 | 19.00 |
| 7 | 3/4 | 1 1/2 | 21.00 | 23.00 |
| 8 | 7/8 | 5/8 | 22.50 | 26.00 |



WITH BOOM
SOCKET AND
SHACKLE

Made of wrought iron, galvanized; band can be bolted on without the

mast or rigging. Swivel socket pin made with a slot for cotter spring so band will not drop off.

| Diam. Band, Inches | Diam. Boom End of Socket, Ins. | Diam. Belaying Pin Hole, Inch | Each, With-out Pin Holes | Each, With Four Pin Holes | Each, With Six Pin Holes |
|--------------------|--------------------------------|-------------------------------|--------------------------|---------------------------|--------------------------|
| 3 | 1 3/4 | 3/8 | \$ 9.50 | \$15.00 | .... |
| 3 1/2 | 2 | 3/8 | 10.00 | 17.00 | .... |
| 4 | 2 1/4 | 3/8 | 11.00 | 19.00 | .... |
| 4 1/2 | 2 1/4 | 3/8 | 11.50 | 21.00 | .... |
| 5 | 2 1/2 | 3/8 | 12.00 | 23.50 | \$25.00 |
| 6 | 3 | 7/8 | 15.00 | 25.00 | 26.00 |
| 7 | 3 1/2 to 4 1/2 | 1 1/2 | 17.50 | 26.00 | 29.00 |
| 8 | 5 | 5/8 | 21.50 | 28.00 | 32.00 |

Note—Belaying pins are not included in above prices.

No. 199A
BRONZE

With Mast Plate

Gooseneck for booms from 1 3/4 to 2 1/4 inches have boom straps, as illustrated. Polished finish.

| Mast Diameter | Diameter Boom End, Inches | Each |
|---------------|---------------------------|--------|
| To | 1 3/4 | \$5.00 |
| Your | 2 | 6.00 |
| Specification | 2 1/4 | 7.50 |
| | 2 3/4 | 9.00 |



GOOSE NECK BANDS



No. 414—BRONZE—WITH ONE MAST BAND

Furnished with boom straps as illustrated, can also be furnished with belaying pins on band, on special order. Bolted construction, band can be attached without disturbing mast or rigging. Polished finish.

| Mast Diam., Inches | Diam. Boom End, Inches | Each |
|-----------------------|---------------------------|--------|
| To | 1 3/4 | \$7.50 |
| Your | 2 | 9.00 |
| Specification | 2 1/4 | 12.00 |
| | 2 3/4 | 15.00 |
| | 3 1/2 | 18.00 |

No. 415—BRONZE—WITH TWO MAST BANDS

Goosenecks for booms from 1 3/4 to 2 1/4 inch diameter have boom straps as shown in No. 199B. Goosenecks for booms 2 3/4 inch diameter and larger have a socket boom end. Can be furnished with belaying pins when required. Goosenecks with two bands can be furnished with the bands wide apart and a long bolt on which the boom fitting can slide up and down.

| Mast Diameter, Inches | Diameter Boom End, Inches | Each | Mast Diameter, Inches | Diameter Boom End, Inches | Each |
|-----------------------------|------------------------------------|---------|-----------------------------|------------------------------------|---------|
| To | 1 3/4 | \$12.00 | To | 4 | \$35.00 |
| Suit | 2 | 15.00 | Suit | 5 | 45.00 |
| Require- | 2 1/4 | 18.00 | Require- | 5 1/2 | 55.00 |
| ments | 2 3/4 | 22.00 | ments | 6 1/4 | 70.00 |
| | 3 1/2 | 25.00 | ..... | ... | ..... |
| ... | | | | ... | |

YACHT BELAYING PINS

GALVANIZED MALLEABLE IRON AND BRASS

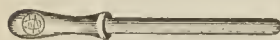


Fig. 521

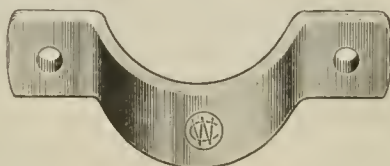
Generally used in a strip of wood called the pin rail, which is often located at a convenient height near the mast or at the inner side of rail near the shrouds.

The Pins are used as a cleat for belaying halyards. The rope is passed around the Pin below the pin rail, then around the Pin above the pin rail, etc., alternately until made fast. They are often used in connection with "Goose-Necks."

| Diameter of Shank, Inches | Length of Head, Inches | Entire Length, Inches | Weight Each, Lbs. | Galvanized, Each | Polished Brass, Each |
|---------------------------------|------------------------------|-----------------------------|-------------------------|---------------------|----------------------------|
| 3/8 | 3 1/8 | 8 | 3/8 | \$0.40 | \$1.60 |
| 1/2 | 3 5/8 | 9 1/2 | 3/4 | .60 | 1.95 |
| 5/8 | 3 5/8 | 10 | 1 1/8 | .80 | 2.70 |
| 3/4 | 4 5/8 | 11 1/2 | 1 3/8 | 1.00 | 3.40 |

MILITARY MAST STRAPS

Used on cruiser military masts for holding cross arm. Made in two sizes of cast brass, plain or polished finish. Hole diameters in base, 1/4 inch.



| No. | Size Base, Inches | Projection, Inches | Width Inside, Inches | Plain, Each | Polished Each |
|------|----------------------|-----------------------|-------------------------|----------------|------------------|
| MMS | 1x5 3/4 | 1 3/8 | 1 7/8 | \$0.85 | \$1.20 |
| MMS2 | 1x4 7/8 | 1 | 2 1/4 | .80 | 1.15 |

SAILBOAT WINCHES



No. 395—BRONZE RATCHET

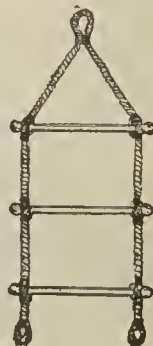
Made with a double ratchet so that the handle can be used with a pump motion. The handle is readily removable, but cannot accidentally drop out of its socket. They are strong, positive, and the construction so simple that it is not likely to get out of order. The three sizes cover the needs of all boats from the Star to the P Classes. The power ratio is 8 to 1, but an iron bar may be used in place of the bronze handle if greater power is desired.

| Size, No. | Drum Diameter, Inches | For Rope, Inch | Each |
|--------------|-----------------------------|----------------------|---------|
| 1 | 1 3/4 | 3/8 | \$12.50 |
| 2 | 2 1/4 | 1/2 | 17.50 |
| 3 | 3 | 5/8 | 25.00 |

SWIMMING LADDERS

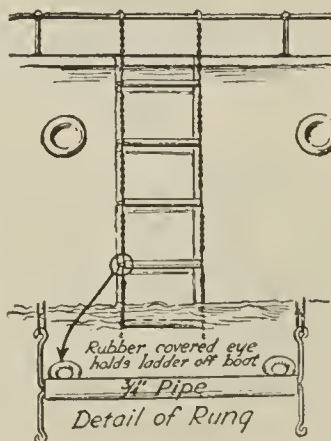
ROPE

The ideal ladder to help climb aboard after a swim. Can be rolled up easily and kept under a seat. Made of 3/4 inch Manila rope with maple rungs, 1 inch x 14 inches spaced one foot apart. Has two eyes spliced to lower end to which a line may be fastened that is tied around the waist of a swimmer so that when tired can pull themselves back to the ladder and climb aboard. Can be furnished in longer lengths for fire escapes and ships painters use.



| No. of Rungs | Length, Feet | Each |
|-----------------|-----------------|--------|
| 2 | 3 1/2 | \$3.00 |
| 3 | 5 | 3.50 |
| 4 | 6 | 4.00 |
| 5 | 7 | 4.50 |
| 6 | 8 | 5.10 |

Note: For longer lengths add \$0.60 per foot to above list.



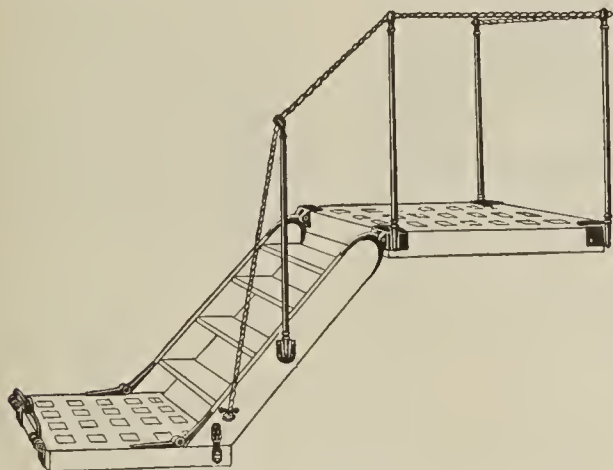
CHAIN

Ladder is made of iron thoroughly hot galvanized, making a strong, as well as durable, article. The steps are made of 3/4 inch pipe and are 10 inches wide. The chain used is American No. 1 Tenso, which is a 12 gauge patented chain. Behind each rung are two round eyes covered with rubber which serve as guards for bumpers so that the Ladder will not mar the hull of the boat. These eyes are arranged so that a piece of pipe may be put down through them, thus forming a rigid ladder and keeping it from swinging under the hull of the boat when it is being used. The rubber on these bumpers cannot be replaced when it is worn out, but the metal eyes can be served with twine as a substitute. Fitted with two hooks for attaching to boat.

| | Each |
|------------------------|--------|
| With 4 Rungs | \$7.50 |
| Additional Rungs | 2.00 |

Note: Additional rungs are easily attached.

GANGWAY LADDER FITTINGS



No. 222

Each set comprises all the fittings necessary such as hinges, corners, sockets, stanchions, etc. All parts are polished brass; the cut shows the complete set of parts that will be furnished on all orders.

| Size, Nos. | Suitable Size of Platform, Inches | Per Set |
|---------------|--------------------------------------|------------|
| 1 | 22x24 | \$ 95.00 |
| 2 | 28x30 | 130.00 |

LADDER LOCKS

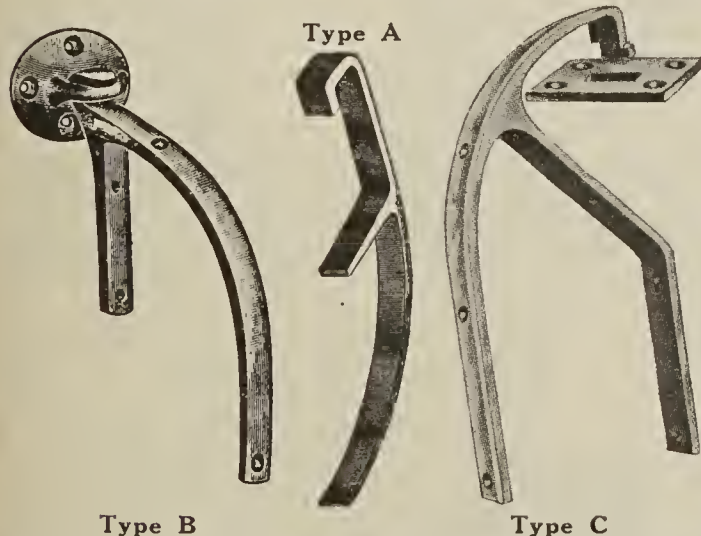


POLISHED BRASS

Holds the ladder securely in place. They may be attached to either outside or inside of ladder and will hold the ladder in position; the ladder may be instantly removed but cannot work loose. Each set consists of four pieces.

Polished Brass—Weight per Set, 1 Lb.\$1.75

LADDER RAIL HOOKS



Type A

Type B

Type C

Made in three styles "A" to hook over rail; "B" to hook into eye under rail; "C" to hook into socket on top of rail.

| Sizes | Wood, Inches | Length, Inches | Plate, Inches | Price, Set |
|-------|-----------------|-------------------|------------------|---------------|
| A | 5½ x 1 | 9 | None | \$8.50 |
| B | 5 x 1 | 12 | 3⅜ x 3⅝ | 8.50 |
| C | 4⅞ x 1 | 10 | 1½ x 2¾ | 8.50 |

Polished Brass finish, set consists of two hooks and two plates, except style "A" where two hooks are furnished only.

SPRAY HOOD STANCHION SOCKETS

STATIONARY
Style 6593

For holding spray hood stanchion; attaches to the coaming of a boat. Made of polished bronze, or cast iron; galvanized; plain inside; holes in plate countersunk for wood screws.

| For Rod, Diam., Ins. | Size Plate, Inches | Weight Each, Ounces | Galv. Iron | Each Plain Brass | Polished Bronze |
|-------------------------|-----------------------|---------------------------|---------------|------------------------|--------------------|
| ½ | 2⅛x1¾ | 4½ | \$0.20 | \$0.50 | \$0.75 |
| 5/8 | 2⅛x2 | 5 | .25 | .55 | .80 |
| ¾ | 2⅛x2⅛ | 6 | .30 | .60 | .90 |
| 7/8 | 2⅛x2⅜ | 8 | .35 | .65 | .95 |
| 1 | 2⅛x2⅝ | 9 | .40 | .70 | 1.15 |
| 1⅛ | 2¾x3 | 13 | .45 | .90 | 1.25 |
| 1¼ | 2¾x3¼ | 14¾ | .55 | 1.25 | 1.75 |

SPRAY HOOD ROD
ATTACHMENTS

JOINTED

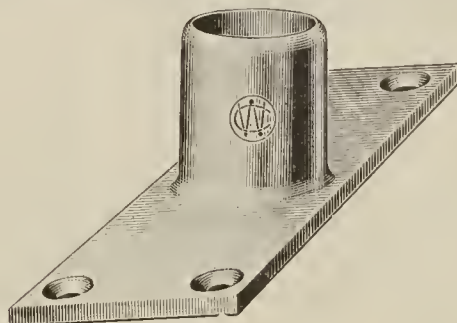
Style 6591

For supporting spray hood rods or pipe; attaches to the coaming of a boat. Made of malleable iron, galvanized or bronze, polished; tapped for ¼-inch pipe or ½-inch rod



| Size Nos. | Number of Sockets | Weight Each, Lbs. | Per Pair |
|--------------|----------------------|----------------------|--------------------------------------|
| 1 | 3 | ⅞ | Galv. Iron \$2.40 Pol. Bronze \$5.00 |

AWNING STANCHION SOCKETS

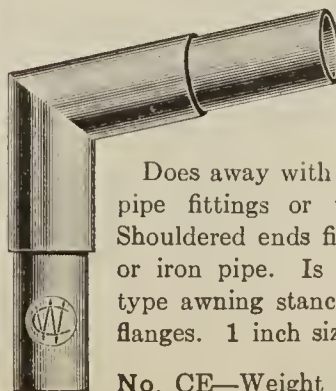


DECK TYPE

Base has a ten degree angle to fit curve on deck. Cast brass, plain or highly polished finish. Has 1½ inch hole to fit ¾ inch brass or iron pipe. Screw holes countersunk for No. 14 oval or flat head screws. Size of base, 2x4½ inches.

| No. | AS—Plain—Weight Each, 1 Lb. | Each |
|-------------------------|-----------------------------|--------|
| No. ASP—Polished Finish | | \$1.00 |
| | | 1.90 |

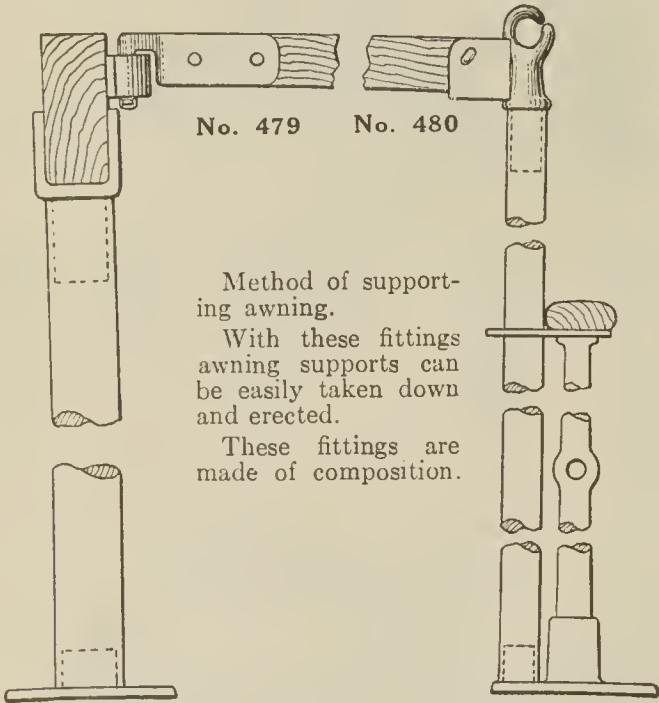
CANOPY ELBOWS



Does away with the necessity of using unsightly pipe fittings or wood in canopy construction. Shouldered ends fit snugly inside of ¾ inch brass or iron pipe. Is used in conjunction with deck type awning stanchion sockets or plain pipe floor flanges. 1 inch size; polished cast brass.

| No. | CE—Weight Each, 9½ Ounces | Each |
|-----|---------------------------|--------|
| | | \$1.40 |

AWNING STANCHION FITTINGS



No. 479 No. 480

Method of supporting awning.

With these fittings awning supports can be easily taken down and erected.

These fittings are made of composition.

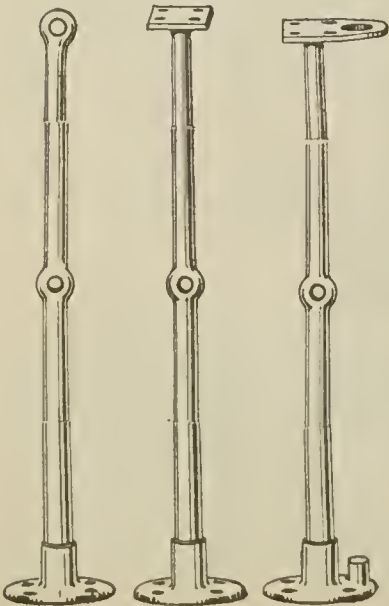
No. 480 consists of boss to fit into pipe stanchion, socket to take wooden brace, and eye for wire rope. The eye has an opening between offset points so that the wire can be removed without working from an end, and the wooden brace can be removed from the socket by withdrawing a cotter pin.

Size No. 1 has boss for 3/4 inch pipe.....\$1.15
Size No. 2 has boss for 1 inch pipe..... 1.35

No. 479 consists of a hook with a socket for the brace and an eye screwed to the strong-back. The hook can be removed from the eye by withdrawing a cotter.

Size No. 1 matches with No. 480, Size No. 1...\$1.50
Size No. 2 matches with No. 480, Size No. 2... 1.50

RAIL STANCHIONS



Made of galvanized wrought steel.

The base is at an angle of five degrees to conform to crown of deck. The standard size is 7/8 inch diameter at base and 28 1/2 inches high.

No. 178 has eye at top for wire rope.

No. 178 has a plate at top to screw to underside of a wood rail.

No. 180 has a plate at top to screw to underside of a wood rail and is also fitted to carry a pipe awning stanchion.

| Nos. | Weight Each, | | Each |
|------|--------------|--|--------|
| | Lbs. | | |
| 178 | 5 | | \$4.75 |
| 179 | 5 | | 4.75 |
| 180 | 5 | | 5.00 |

PORT LIGHTS

ROUND PATTERN FOR WOOD HULLS
Style 6011



Fitted to cabin or hull from the outside. Easier to install than octagon type.

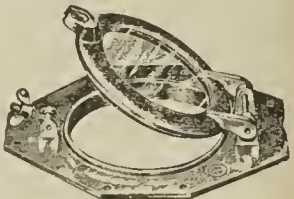
Made of malleable iron, hot galvanized finish and cast brass, plain or polished finish, with one wing nut fastening. Now made same as Seamore portlight to hold screens and snap ring, has a groove in collar to hold these.

| Size Opening, Inches | Diam. Frame, Inches | | Thickness of Glass, Inch | Each | | |
|----------------------|---------------------|--------|--------------------------|------------|-----------|------------|
| | Galvanized | Brass | | Galvanized | Pl. Brass | Pol. Brass |
| 3 | 5 3/8 | 5 1/4 | 1/4 | \$2.75 | \$3.00 | \$5.00 |
| 4 | 7 1/8 | 7 1/8 | 1/4 | 3.00 | 3.25 | 6.00 |
| 5 | 8 1/2 | 8 1/4 | 1/4 | 3.75 | 4.50 | 7.25 |
| 6 | 10 1/4 | 9 1/4 | 1/4 | 4.50 | 5.25 | 8.00 |
| 7 | 11 1/4 | 10 5/8 | 1/4 | 6.25 | 7.00 | 10.00 |
| 8 | 12 3/4 | 11 3/4 | 1/4 | 7.75 | 8.50 | 12.50 |
| 9 | 14 1/4 | 13 1/2 | 1/4 | 10.25 | .... | .... |

OCTAGON PATTERN FOR WOOD HULLS
Style 6009

Fitted to cabin or hull from the outside. Watertight when closed.

Made of malleable iron, hot galvanized finish and cast brass plain finish, with one wing nut fastening.



| Size Opening, Inches | Size Frame, Inches | | Thickness of Glass, Inch | Each | |
|----------------------|--------------------|------------------|--------------------------|--------|-------------|
| | Galvanized | Brass | | Galv. | Plain Brass |
| 4 | 7 1/2 x 6 1/8 | 7 1/2 x 6 1/8 | 1/4 | \$3.00 | \$3.25 |
| 5 | 10 x 8 | 9 1/8 x 7 1/4 | 3/8 | 3.75 | 4.50 |
| 6 | 11 3/8 x 9 1/4 | 10 1/8 x 8 1/8 | 3/8 | 4.50 | 5.25 |
| 7 | 12 3/8 x 6 7/8 | 11 7/16 x 9 9/16 | 1/2 | 6.25 | 7.00 |
| 8 | 14 3/8 x 11 1/4 | 12 3/4 x 10 5/8 | 1/2 | 7.75 | 8.50 |
| 10 | 14 1/2 x 13 | 14 1/2 x 12 1/2 | 1 | 12.50 | 14.00 |
| 12 | 18 x 16 1/2 | 17 3/4 x 16 1/4 | 1 1/2 | 19.00 | 21.00 |

OVAL PATTERN FOR WOOD HULLS
Style 6013



Most easily applied form of port light. Used also where low cabin prohibits use of round port lights. Made of cast brass, plain or polished finish with single wing nut fastening.

| Size Opening, Inches | Size Frame, Inches | Each | |
|----------------------|--------------------|--------|----------|
| | | Plain | Polished |
| 4x7 | 6 1/2 x 10 1/4 | \$6.75 | \$10.00 |
| 5x9 | 7 3/4 x 12 1/2 | 10.00 | 13.50 |

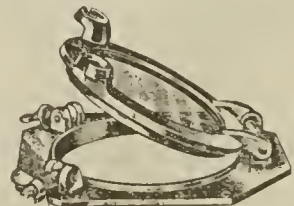
ROUND PATTERN FOR WOOD HULLS
Style 6007

Made of malleable iron, hot galvanized finish and cast brass, plain and polished finish; with two wing nut fastenings. Glass is 1/2 inch thick.

| Diam. Opening, Inches | Diameter Frame, Inches | Each | | |
|-----------------------|------------------------|------------|-------------|------------|
| | | Galvanized | Plain Brass | Pol. Brass |
| 10 | 14 1/2 | \$12.50 | \$14.00 | \$20.00 |
| 12 | 17 3/4 | 19.00 | 21.00 | 30.00 |

Prices on Application

OCTAGON PATTERN FOR WOOD HULLS
Style 6005

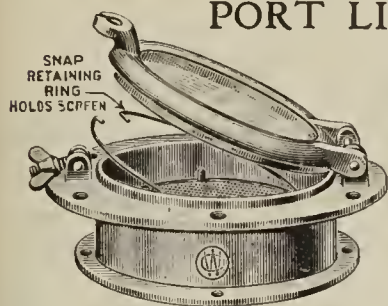


Made of malleable iron, hot galvanized finish and cast brass, plain or polished finish; with two wing nut fastenings, desirable in larger sizes of lights in order that cover may be closed tightly all around.

| Diam. Open., Inches | Size Frame, Inches | Thickness of Glass, Inch | Each | | |
|---------------------|--------------------|--------------------------|------------|-------------|------------|
| | | | Galvanized | Plain Brass | Pol. Brass |
| 10 | 14 1/2 x 12 1/2 | 1/2 | .... | \$21.00 | .... |
| 12 | 17 3/4 x 16 1/4 | 1/2 | .... | 34.00 | .... |
| 14 | 21 1/4 x 19 1/4 | 3/4 | .... | .... | .... |

Prices on Application

PORT LIGHTS



CLEAR GLASS

A new style inside pattern portlight which has the same diameter of glass; is clear at the opening, to provide maximum lighting. With deep collar and outside finishing rim. Furnished with and without screens.

| | | | | | | | | |
|--------------------|-------|-------|-------|--------|--------|--------|--------|----|
| Size Light, Inches | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 |
| Maximum Diam. | | | | | | | | |
| Flange, Inches | 6 7/8 | 7 3/4 | 8 7/8 | 10 1/8 | 11 1/2 | 13 1/4 | 14 1/4 | 17 |

Plain Brass

For Thickness of Wood—Be sure to State Thickness of Wood.

| Diam., Inches | Thickness of Glass | Inches | | | |
|------------------|-----------------------|--------|--------|--------|--------|
| | | 1 1/2 | 3 | 4 1/2 | 6 |
| 4 | 1/4 | \$4.50 | \$5.25 | \$6.00 | \$6.75 |
| 5 | 3/8 | 5.25 | 6.00 | 6.75 | 7.50 |
| 6 | 3/8 | 6.50 | 7.25 | 8.25 | 9.50 |
| 7 | 1/2 | 8.25 | 9.50 | 10.75 | 12.00 |
| 8 | 1/2 | 10.75 | 12.00 | 13.75 | 15.75 |
| 9 | 1/2 | 14.00 | 15.50 | 17.75 | 20.00 |
| 10 | 1/2 | 17.50 | 20.25 | 23.50 | 27.00 |
| 12 | 1/2 | 23.50 | 26.75 | 31.00 | 35.75 |

Polished Brass

For Thickness of Wood—Be sure to State Thickness of Wood.

| Diam., Inches | Thickness of Glass | Inches | | | |
|------------------|-----------------------|--------|--------|--------|--------|
| | | 1 1/2 | 3 | 4 1/2 | 6 |
| 4 | 1/4 | \$6.00 | \$6.75 | \$7.50 | \$8.25 |
| 5 | 3/8 | 7.25 | 8.00 | 8.75 | 9.50 |
| 6 | 3/8 | 8.75 | 9.50 | 10.50 | 11.75 |
| 7 | 1/2 | 11.00 | 12.25 | 13.50 | 14.75 |
| 8 | 1/2 | 13.75 | 15.00 | 16.75 | 18.75 |
| 9 | 1/2 | 17.75 | 19.25 | 21.50 | 23.75 |
| 10 | 1/2 | 23.00 | 25.75 | 29.00 | 32.50 |
| 12 | 1/2 | 33.00 | 36.25 | 40.50 | 45.25 |

Without Finishing Rings deduct from above prices.

| | | | | | | | | |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| Plain | \$0.45 | \$0.55 | \$0.65 | \$0.80 | \$1.00 | \$1.50 | \$2.00 | \$2.50 |
| Polished | .60 | .75 | .85 | 1.10 | 1.35 | 2.00 | 2.75 | 3.25 |

4 to 10 inch Lights have one fastening; 12 inch have two fastenings.

6, 7, 8, 9 and 10 inch may be had with two fastenings, add 50c to the list.

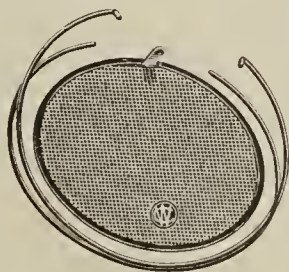
| | | | | | | | | |
|-------------------------|--------|----|----|----|----|----|----|--------|
| Drilled for Wood Screws | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 in. |
| Flange | No. 12 | 12 | 12 | 14 | 14 | 18 | | |
| Finishing Ring | No. 6 | 10 | 12 | 12 | 12 | 12 | | |

Note: Can be furnished with copper screens of push-in type (which can remain in position when light is closed) at small additional cost.

SCREENS

FOR ABOVE PORT LIGHT
SNAP RING TYPE

For inside pattern port lights. Are placed inside the spigot or tube of the light and are entirely out of the way of the glass sash when closed. Held in place by two snap wire rings which fit into grooves cut into the spigot. One ring is easily removed and screen can be taken out at will. Screen is made of high grade copper.



| Size, Inches | Each | Size, Inches | Each |
|-----------------|--------|-----------------|--------|
| 4 | \$0.90 | 8 | \$1.40 |
| 5 | .95 | 9 | 1.45 |
| 6 | 1.00 | 10 | 1.75 |
| 7 | 1.20 | 12 | 2.50 |

OVAL PORT LIGHTS

No. 131—IMPROVED
INSIDE PATTERN
WITH DEEP COLLAR

Designed for yachts and all boats with low trunk cabins where space is limited and does not permit the use of a circular light. Plain or polished brass. Push-in type screens with brass frames and copper mesh, which can remain in position when

light is closed, can be furnished and are not included in the prices listed. Finishing Rims included.

| Size Opening, Inches | Size of Flange, Inches | Length of Collar for Thickness of Wood, Inches | | | | | | | |
|----------------------------|------------------------------|--|---------|--------|---------|---------|---------|---------|---------|
| | | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 |
| 4 x 7 | 6 1/2 x 9 1/2 | \$3.50 | \$11.00 | \$9.50 | \$12.00 | \$10.50 | \$13.00 | \$11.50 | \$14.00 |
| 5 x 9 | 7 3/4 x 11 3/4 | 11.00 | 14.50 | 13.00 | 16.50 | 15.00 | 18.50 | 17.00 | 20.50 |
| 6 3/4 x 12 | 9 1/2 x 15 | 18.00 | 23.00 | 21.00 | 26.00 | 24.00 | 29.00 | 27.00 | 34.00 |

Note—Always specify thickness of wood when ordering.

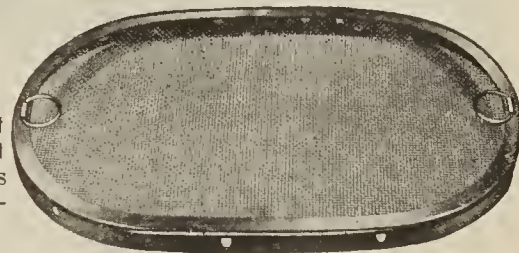
OUTSIDE FINISHING RIMS

| Size, Inches | Plain, Each | Polished, Each |
|-----------------|----------------|-------------------|
| 4 x 7 | \$0.50 | \$0.75 |
| 5 x 9 | .75 | 1.25 |
| 6 3/4 x 12 | 1.00 | 1.50 |

PORT LIGHT SCREENS

No. 131A
OVAL

Made to put in No. 131 port lights; has brass frame and copper screening.

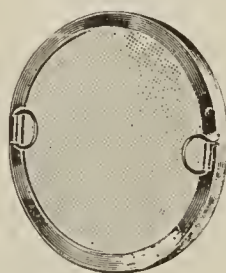


| Size, Inches | Each |
|--------------|--------|
| 4 x 7 | \$1.25 |
| 5 x 9 | 1.50 |
| 6 3/4 x 12 | 2.50 |

SHALLOW PORT LIGHT SCREENS

TO FIT RECESSED PORT LIGHTS

Spun brass frame, one piece, no seam, copper wire mesh.



| Size Port Light, Inches | Price, Each | Size Port Light Inches | Price, Each |
|----------------------------------|----------------|---------------------------------|----------------|
| 4 | \$1.00 | 10 | \$2.10 |
| 5 | 1.10 | 12 | 2.35 |
| 6 | 1.30 | 14 | 2.50 |
| 7 | 1.50 | 16 | 3.00 |
| 8 | 1.70 | 18 | 3.50 |
| 9 | 1.90 | 20 | 3.75 |

Fig. 434

Exact size of screen. Add 1/8 inch to above sizes.

Brass rim with copper screening. Made to fit the standard sizes of port holes. In ordering, measure all diameters of openings and lengths through of all lights as there may be a slight difference in measurements in same size of port lights.



Fig. 154

| Size, Inches | Each | Size, Inches | Each |
|-----------------|--------|-----------------|--------|
| 3 | \$1.25 | 8 | \$2.60 |
| 4 | 1.50 | 9 | 3.25 |
| 5 | 1.75 | 10 | 3.75 |
| 6 | 2.00 | 12 | 4.25 |
| 7 | 2.25 | .. | .... |

When ordering give exact opening size of each port light and depth required. Screens made to fit not returnable.

PORT LIGHTS

FOR STEEL HULLS
STANDARD PATTERN
Style 5999



Heavy standardized, same size opening as clear of glass. Made of brass, natural brass finish. Solid frame inside with bezel ring outside to withstand heavy sea washes against side of ship. Eye cast onto storm shutter for hanging up out of way.

| Diam. Open'g Inches | Diameter of Clear Glass, Inches | Diameter of Frame, Inches | Outside Diam. of Spigot, Inches | Thickness of Glass, Inches | Weight Each, Lbs. | Each |
|---------------------|---------------------------------|---------------------------|---------------------------------|----------------------------|-------------------|--------|
| 10 | 10 | 14 3/8 | 10 3/8 | 3/4 | 48 | \$.... |
| 12 | 12 | 16 3/8 | 12 3/8 | 3/4 | 54 1/2 | .... |
| 14 | 14 | 18 1/2 | 14 1/2 | 7/8 | 66 3/4 | .... |
| 16 | 16 | 20 1/2 | 16 1/2 | 1 | 90 3/4 | .... |
| 18 | 18 | 21 1/8 | 18 5/8 | 1 | 103 3/4 | .... |

Prices Upon Application

WITHOUT STORM SHUTTER
FOR STEEL HULLS

Style 6003

Made of heavy brass, polished finish; standardized, same opening as clear of glass. Solid frame inside with screwed bezel ring outside to withstand heavy sea washes against side of ship. Has four loop nut fastenings.



| Diam. Open'g Inches | Diameter of Clear Glass, Inches | Diameter of Frame, Inches | Outside Diam. of Spigot, Inches | Thickness of Glass, Inch | Weight Each, Lbs. | Each |
|---------------------|---------------------------------|---------------------------|---------------------------------|--------------------------|-------------------|--------|
| 10 | 10 | 14 3/8 | 10 3/8 | 3/4 | 32 1/2 | \$.... |
| 12 | 12 | 16 3/8 | 12 3/8 | 3/4 | 42 | .... |
| 14 | 14 | 18 1/2 | 14 1/2 | 7/8 | 52 3/4 | .... |
| 15 | 15 | 19 3/8 | 15 3/8 | 3/4 | 56 3/4 | .... |
| 16 | 16 | 20 1/2 | 16 1/2 | 1 | 72 3/4 | .... |
| 18 | 18 | 23 1/8 | 18 5/8 | 1 | 83 3/4 | .... |

Prices Upon Application

FIXED OR DECK LIGHTS
ROUND PATTERN

No. 5240
FOR STEEL HULLS

Brass frame, plate glass lens. Glass is secured by flat brass ring fastened with machine screws. Polished brass finish.

| Diam. Clear Glass, Ins. | Thickness Glass, Inch | Diameter Frame, Inches | Weight Each, Lbs. | Each |
|-------------------------|-----------------------|------------------------|-------------------|------|
| 10 | 1/2 | 13 3/4 | 13 1/2 | .... |
| 12 | 5/8 | 15 7/8 | 18 | .... |

No. 5241

Plate glass lens; brass frame; polished brass finish. Glass is secured by threaded bezel ring.

| Diam. Clear Glass, Ins. | Thickness Glass, Inch | Diameter Frame, Inches | Weight Each, Lbs. | Each |
|-------------------------|-----------------------|------------------------|-------------------|--------|
| 8 | 1/2 | 11 1/4 | 9 | \$.... |
| 10 | 1/2 | 13 3/8 | 12 1/2 | .... |
| 12 | 5/8 | 15 1/2 | 16 1/2 | .... |

All Above, Prices Upon Application

DECK LIGHTS

Style 6017

Cast brass frames in plain and polished brass finishes; with heavy plate glass lights held in place by threaded bezel ring. For wood decks.



| Size Glass, Inches | Size Frame, Inches | Each Plain | Each Polished | Size Glass, Inches | Size Frame, Inches | Each Plain | Each Polished |
|--------------------|--------------------|------------|---------------|--------------------|--------------------|------------|---------------|
| 3 1/2 | 5 3/4 | \$2.75 | \$3.75 | 6 | 8 1/2 | \$4.50 | \$5.75 |
| 4 | 6 1/2 | 3.00 | 4.00 | 7 | 9 1/2 | 6.50 | 8.00 |
| 5 | 7 1/2 | 3.75 | 5.00 | 8 | 11 | 8.25 | 10.25 |

DECK LIGHTS

RIBBED GLASS
WITH FRAME



Recessed type. To be set in deck. Made of cast brass, polished finish. For wood or steel decks.

| Nos. | Size, Inches | Size Frame, Inches | Complete Each |
|------|---------------|--------------------|---------------|
| 01 | 6 x3 | 10 1/2 x7 1/2 | \$8.40 |
| 02 | 9 1/2 x2 1/2 | 13 1/2 x7 | 9.80 |
| 03 | 10 3 | 14 1/2 x7 1/2 | 11.20 |
| 04 | 10 1/2 x3 1/2 | 15 x8 | 12.60 |
| 05 | 12 x4 | 17 x9 | 15.40 |

DECK LIGHT FRAMES

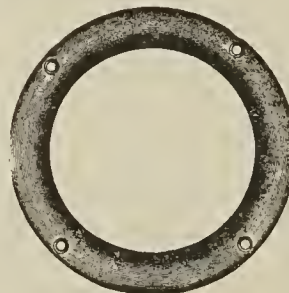
FOR RIBBED GLASS LIGHT

No. 6063

Cast brass, polished finish. For holding ribbed glass lights in place.



| For Glass, Inches | Each | For Glass, Inches | Each |
|-------------------|--------|-------------------|--------|
| 10 x3 | \$3.40 | 12 x4 | \$4.15 |
| 10 1/2 x3 1/2 | 3.75 | ..... | .... |



ROUND

Style 6035

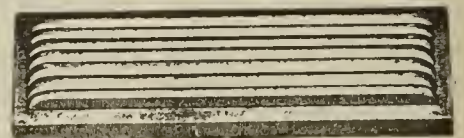
Made of cast brass, in plain and polished brass finishes.

| Size, Nos. | Outside Diam., Inches | Inside Diam., Inches | Each Plain | Each Polished |
|------------|-----------------------|----------------------|------------|---------------|
| 1 | 5 3/4 | 3 7/8 | \$0.60 | \$0.95 |
| 2 | 6 1/4 | 4 3/8 | .65 | 1.00 |
| 3 | 6 3/4 | 4 7/8 | .70 | 1.10 |
| 4 | 7 1/4 | 5 1/4 | .75 | 1.25 |
| 5 | 8 | 5 3/4 | .80 | 1.50 |
| 6 | 8 1/2 | 6 1/4 | 1.00 | 1.90 |
| 7 | 9 3/4 | 7 1/4 | 1.10 | 2.10 |
| 8 | 11 1/4 | 8 1/4 | 1.50 | 2.50 |
| 9 | 12 1/4 | 9 1/4 | 2.25 | 3.50 |

GLASS DECK LIGHTS

RIBBED

Clear pressed glass; deep ribs.



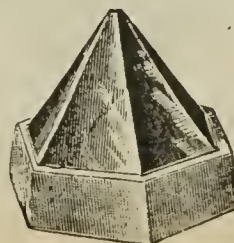
| Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|---------------|-------------------|--------|
| 1 | 6 x3 | 2 | \$1.35 |
| 2 | 9 1/2 x2 1/2 | 3 1/4 | 2.55 |
| 3 | 10 x3 | 4 1/4 | 2.70 |
| 4 | 10 1/2 x3 1/2 | 5 | 3.20 |
| 5 | 12 x4 | 7 1/4 | 4.50 |

GLASS DECK LIGHTS

HEXAGON

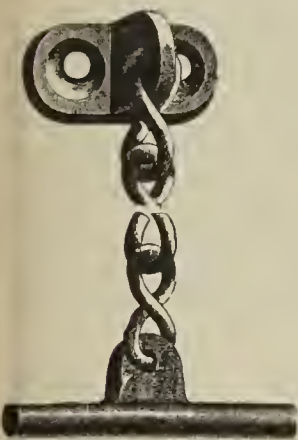
Style 6025

Clear pressed glass; uniform size.



| Nos. | Diameter Face, Inches | Weight per Dozen, Lbs. | Each |
|------|-----------------------|------------------------|--------|
| 1 | 3 | 3 1/8 | \$1.25 |
| 2 | 4 | 4 1/8 | 2.60 |

PORT LIGHT CHAINS



CAST BRASS

Made of open link twisted brass chain; plain finish; fifteen inches long. Cast brass ends. For use with all port lights opening up.

Each
Port Light Chains.....\$1.00

WIND SCOOPS

FOR PORT HOLES

Made in copper, brass and galvanized iron, to fit standard sizes of port holes. Can be furnished with screen at extra charge.



Fig. 153

| Diameter, Inches | Galvanized, Each | Brass Each |
|------------------|------------------|------------|
| 3 | \$1.50 | \$2.50 |
| 4 | 1.80 | 2.90 |
| 5 | 2.10 | 3.30 |
| 6 | 2.40 | 3.70 |
| 7 | 2.70 | 4.10 |
| 8 | 3.00 | 4.50 |
| 9 | 3.30 | 4.90 |
| 10 | 3.60 | 5.30 |
| 12 | 4.30 | 6.25 |

PORT AND DECK LIGHT GLASSES



Furnished to order round, oval, square, oblong or special shapes, in any thickness; with ground edge, polished ground or chipped surface. Nipped edge glasses are supplied unless great accuracy is needed, when the edges are ground. Can also be furnished with bevel edge; when ordering bevel edge specify total thickness and thickness to the bevel.

Each
Port and Deck Light Glasses.....\$....
Prices on Application

DECK PLATES

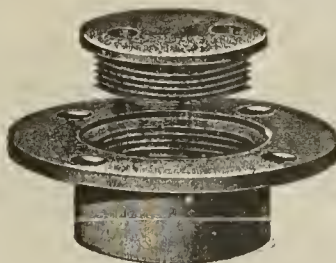


Style 6099

Made of cast brass; polished natural brass finish. Regular round pattern. Inset and flanged plate have machine cut threads. One cast brass key is furnished with each plate.

| Diam. Opening, Inches | Diam. Plate, Inches | Counter-sunk for Screw Nos. | Each | Diam. Opening, Inches | Diam. Plate, Inches | Counter-sunk for Screw Nos. | Each |
|-----------------------|---------------------|-----------------------------|--------|-----------------------|---------------------|-----------------------------|--------|
| 1 | 2 1/4 | 6 | \$0.80 | 3 1/2 | 5 1/8 | 12 | \$2.60 |
| 1 1/4 | 2 1/2 | 8 | .85 | 4 | 5 3/4 | 12 | 2.75 |
| 1 1/2 | 2 3/8 | 8 | .90 | 4 1/2 | 7 | 12 | 4.00 |
| 2 | 3 1/8 | 10 | 1.25 | 5 | 7 3/8 | 12 | 4.25 |
| 2 1/2 | 4 1/8 | 10 | 1.75 | 6 | 8 1/8 | 12 | 5.50 |
| 3 | 4 11/16 | 12 | 2.25 | 8 | 10 11/16 | 14 | 10.50 |

DECK PLATES

Style 6101
IRON PIPE SIZES

Flush type. Made of cast brass; polished finish. Threaded with pipe threads in standard pipe sizes. Cast brass, polished; key furnished with each plate. Used for direct deck pipe connection to gasoline tank.

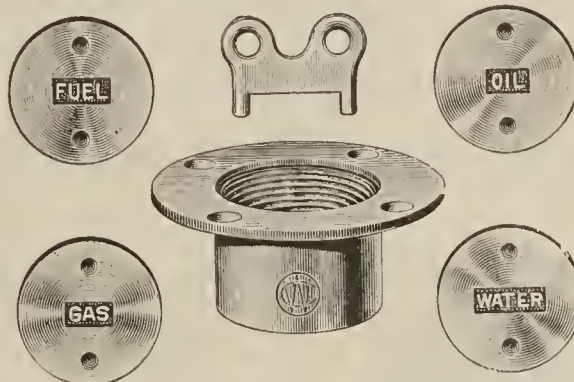
| Nos. | For Pipe, Inches | Each | Nos. | For Pipe, Inches | Each |
|------|------------------|--------|------|------------------|--------|
| 1 | 3/4 | \$1.00 | 5 | 2 | \$2.00 |
| 2 | 1 | 1.25 | 6 | 2 1/2 | 2.50 |
| 3 | 1 1/4 | 1.50 | 7 | 3 | 3.75 |
| 4 | 1 1/2 | 1.75 | .. | ... | .... |

Style 6103
WITH EXTRA RIM FOR VENTILATORS

Flush type. Made of cast brass; polished finish. Ventilator rim, inset and collar flange have machine cut threads. Cast brass key furnished with each plate. Rim may be had separately.



| Diam. Opening, Inches | Diameter Plate, Inches | Each | Diameter Opening, Inches | Diameter Plate, Inches | Each |
|-----------------------|------------------------|--------|--------------------------|------------------------|--------|
| 3 | 4 7/8 | \$3.10 | 4 1/2 | 6 3/8 | \$5.50 |
| 3 1/2 | 5 5/8 | 3.60 | 5 | 7 1/8 | 6.00 |
| 4 | 6 | 4.00 | 6 | 8 1/4 | 7.50 |



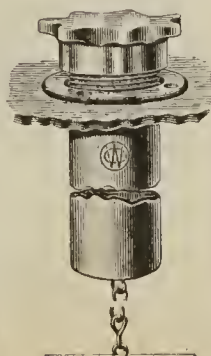
Flush type; furnished plain or impressed with the words, "Gas," "Fuel," "Oil" and "Water." Made of polished, cast brass with machine cut threads. One brass key furnished with each plate.

Style 536—Threaded for Pipe Connection

| Size, Nos. | For Pipe, Inches | Weight Each, Ozs. | Each | Size, Nos. | For Pipe, Inches | Weight Each, Lbs. | Each |
|------------|------------------|-------------------|--------|------------|------------------|-------------------|--------|
| 1 | 3/4 | 5 | \$1.00 | 5 | 2 | 16 | \$2.00 |
| 2 | 1 | 6 | 1.25 | 6 | 2 1/2 | 25 | 2.50 |
| 3 | 1 1/4 | 8 | 1.50 | 7 | 3 | 2 1/8 | 3.75 |
| 4 | 1 1/2 | 11 | 1.75 | .. | ... | .... | .... |

GAS TANK CAP

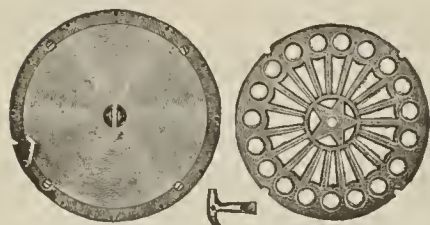
No. 5321



A sturdy cast brass nickel plated tank cap with a length of chain and a bar attached. This acts as a stopper and prevents the cap from falling overboard. The cap is threaded with standard size threads for 1 1/2 inch pipe. Furnished complete with ring for deck as shown in cut.

Each
No. 5321—Weight, 1 1/4 Lbs.....\$1.50

DECK OR MANHOLE PLATES

No. 5310
BRASS
WATERTIGHT

Made of cast brass; emery finish. Used on larger craft instead of hatchest; has a watertight rubber gasket and is fitted with

grating which is flush with plate when cover is removed. Cover is held in place by four machine screws. Furnished with combination screw driver and lifting hook. Can be furnished with or without grating.

| Size, Nos | Diameter Opening, Inches | Diameter Frame, Inches | Each | |
|--------------|--------------------------------|------------------------------|--------------------|-----------------|
| | | | Without Grating | With Grating |
| 1 | 10 | 13 1/4 | \$22.50 | \$30.00 |
| 2 | 12 | 15 1/4 | 25.00 | 33.00 |
| 3 | 14 | 17 1/4 | 32.00 | 43.00 |
| 4 | 16 | 19 1/4 | 40.00 | 55.00 |
| 5 | 18 | 21 1/2 | 55.00 | 72.50 |
| 6 | 20 | 23 1/2 | 70.00 | 90.00 |

WATER DECK IRONS

Cast iron, hot galvanized finish. For protection of decks, floors and partitions against fires from heated stove pipes.

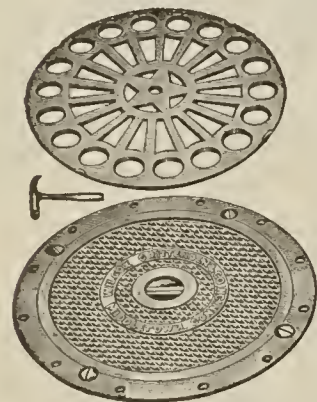


| Size, Inches | Diameter Flange, Inches | Weight Each, Lbs. | Each | Size, Inches | Diameter Flange, Inches | Weight Each, Lbs. | Each |
|-----------------|-------------------------------|-------------------------|------|-----------------|-------------------------------|-------------------------|--------|
| 2 1/2 | 6 3/4 | 2 1/4 | 1.10 | 5 | 10 1/2 | 8 1/2 | \$2.50 |
| 3 | 7 5/8 | 4 | 1.60 | 5 1/2 | 11 | 8 1/2 | 3.00 |
| 3 1/2 | 8 3/8 | 5 | 1.80 | 6 | 11 1/4 | 10 1/2 | 3.40 |
| 4 | 9 1/4 | 6 | 2.10 | 7 | 13 | 16 | 3.90 |
| 4 1/2 | 10 | 6 | 2.30 | 8 | 14 5/8 | 19 | 5.75 |

Note—Sizes indicate opening for pipe. Plain and polished brass furnished to order.

MANHOLE OR BUNKER PLATES

No. 531

GALVANIZED—WATER
TIGHT

For use as manhole or bunker plate in exposed positions; has water tight rubber gasket and is fitted with grating for ventilating purposes, which is flush with plate when cover is removed. Cover is held in place by four machine screws. Made of cast iron, hot galvanized finish. Furnished with combination screw driver and lifting hook. Can be furnished with or without grating.

| Size, Nos | Diameter Opening, Inches | Diameter Frame, Inches | Weight Each, Lbs | Each | |
|--------------|--------------------------------|------------------------------|------------------------|--------------------|-----------------|
| | | | | Without Grating | With Grating |
| 0 | 9 | 12 3/4 | 20 | \$12.00 | ..... |
| 1 | 10 | 13 3/4 | 21 3/4 | 12.75 | \$15.00 |
| 2 | 12 | 15 3/4 | 27 | 16.00 | 19.00 |
| 3 | 14 | 17 3/4 | 37 | 19.00 | 24.50 |
| 4 | 16 | 19 3/4 | 55 | 24.50 | 31.50 |
| 5 | 18 | 21 3/4 | 64 | 25.75 | 34.00 |
| 6 | 20 | 24 | 78 | 30.00 | 38.50 |

Wind Force

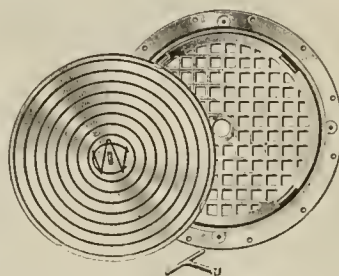
Beaufort's Scale

Velocity Miles
per Hour

| | |
|---|----|
| 0—Calm. Full rigged ship, all sails set, no headway..... | 3 |
| 1—Light Air. Just sufficient to give steerage way..... | 8 |
| 2—Light Breeze. Speed of one or two knots, "full and by"..... | 13 |
| 3—Gentle Breeze. Speed of three or four knots, "full and by"..... | 18 |

YACHT MANHOLE PLATES

WITH GRATING



Attractive in design; water tight construction. Heavy enough for hard service but no unnecessary excess weight. Grating fits in recess in plate and need not be removed when plate is fastened in position. Made in one size and in bronze; machine turned finish. Outside diameter of

frame, 22 inches; inside diameter or clear opening, 18 inches.

No. 5312—Weight Each, 60 Lbs. \$60.00

ROWLOCKS

RIBBED SOCKET
Style 6557

Made of cast iron; galvanized. The most common style of rowlock.

| Size, Nos. | Size Be- tween Horns Inches | Per Pair | | |
|---------------|-----------------------------------|----------|---------------|-----------------|
| | | Complete | Horns Only | Sockets Only |
| 1 | 2 | .20 | .15 | .10 |
| 2 | 2 1/4 | .35 | .25 | .15 |
| 3 | 2 5/8 | .70 | .45 | .30 |
| 4 | 3 | .90 | .60 | .40 |

STANDARD SOCKET
Style 6559

Made of malleable iron, galvanized or plain cast brass.



GALVANIZED IRON

| Size, Nos. | Size Be- tween Horns, Inches | Per Pair | | |
|---------------|------------------------------------|----------|---------------|-----------------|
| | | Complete | Horns Only | Sockets Only |
| 0 | 1 3/4 | \$0.30 | \$0.20 | \$0.20 |
| 1 | 2 | .35 | .25 | .20 |
| 2 | 2 1/4 | .55 | .40 | .30 |
| 3 | 2 1/2 | .90 | .60 | .45 |
| 4 | 3 | 1.10 | .80 | .45 |

BRASS STANDARD
Style 6561

Made of cast brass, polished. Furnished complete with socket and chain.

Size No. 01—Size Between Horns, 2
Inches \$1.70

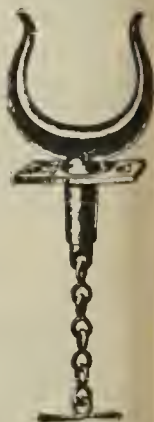


SIDE PLATE

Style 6563

Made of malleable iron or cast brass, polished. Furnished complete with fancy side plate socket and chain. No chain on galvanized rowlocks.

No. 800—Size Between
Horns, 2 Inches..... \$0.80 \$2.70



ROWLOCKS

ROUND PATTERN

Style 6565

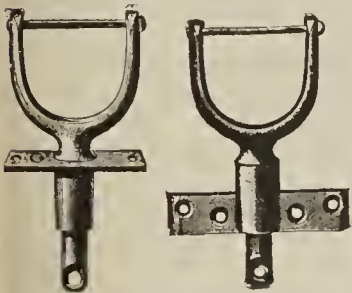
Made of cast iron or malleable iron, galvanized. Oar loom should have leather shoulder.

Cast Iron

| Size, Nos. | Diameter Ring, Inches | Complete | Per Pair—Horns Only | Socket Only |
|-----------------------|-----------------------|----------|---------------------|-------------|
| 1 | 2 1/4 | .30 | .20 | .15 |
| Malleable Iron | | | | |
| 0 | 2 | \$0.35 | \$0.25 | \$0.20 |
| 1 | 2 1/4 | .40 | .30 | .20 |
| 2 | 2 1/2 | .45 | .35 | .20 |



Note—All of the above can be furnished on order with side plate.



NORTH RIVER PATTERN

Made of malleable iron, and hot galvanized. Furnished with regular socket or with side plate. Made fast to an oar with a square loom; cannot be lost.

WITH REGULAR SOCKET

| Nos. | Size Between Horns, Inches | Per Pair Complete | Horns, Only | Sockets Only |
|------|----------------------------|-------------------|-------------|--------------|
| 5377 | 2 | \$0.40 | \$0.30 | \$0.20 |

WITH SIDE PLATE

| | | | | |
|------|---|--------|--------|--------|
| 5378 | 2 | \$0.45 | \$0.30 | \$0.25 |
|------|---|--------|--------|--------|

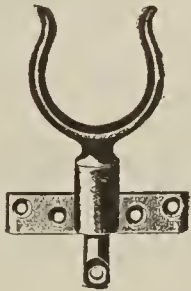
STANDARD SIDE PLATE

Style 6571

Made of cast iron malleable iron, and hot galvanized.

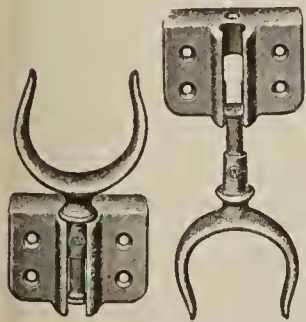
MALLEABLE IRON

| Size, Nos. | Size Between Horns, Inches | Complete | Horns | Socket |
|------------|----------------------------|----------|--------|--------|
| 0 | 1 3/4 | \$0.55 | \$0.40 | \$0.25 |
| 1 | 2 | .60 | .45 | .25 |



DAVIS STANDARD

Turns down out of the way when out of position yet is never detached. Made of malleable iron, galvanized or cast brass, polished.



| Nos. | Size Between Horns, Inches | Galv. Iron | Per Pair—Pol. Bras |
|------|----------------------------|------------|--------------------|
| 0 | 1 3/4 | \$0.80 | .... |
| 1 | 2 | .80 | \$2.50 |
| 2 | 2 1/4 | 1.00 | .... |

SURFACE SWIVEL

Style 6577

Has no extension through the gunwale; smooth, easy-turning surface swivel; fasten to top of a boat's rail.

Furnished in galvanized malleable iron.

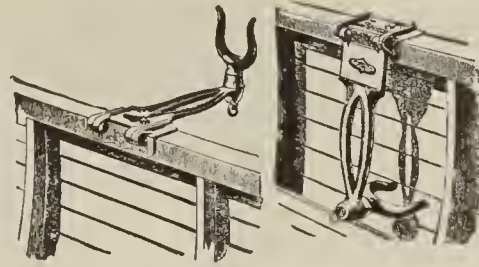
| Size, Nos. | Size Between Horns, Inches | Complete | Horns Only, per Pair | Sockets Only, per Pair |
|------------|----------------------------|----------|----------------------|------------------------|
| 1 | 2 | \$1.50 | \$0.85 | \$0.85 |
| 2 | 2 1/4 | 1.75 | 1.00 | 1.00 |



ROWLOCKS

OUTRIGGER

Adapted for use on all kinds of boats and canoes, but especially to light, narrow pleasure boats, as a longer oar can be used, giving greater speed and much more freedom and ease in rowing;



they extend 7 inches beyond the gunwale of the boat and are 2 inches wide between the horns; made of malleable iron, galvanized.

| Material | Per Pair |
|-----------------|----------|
| Outrigger | \$3.40 |

WHALE AND SEINE BOAT

Malleable iron horns, galvanized; malleable iron or brass sockets; the 2 1/2-inch size is for use on Seine boats and the 3-inch size for whale boats.

Galv. Mall. Iron Horns and Sockets

| Size, Inches | Complete | Per Pair—Horns, Only | Socket Only |
|--------------|----------|----------------------|-------------|
| 2 1/2 | \$.... | \$.... | \$.... |
| 3 | | | |

Galv. Mall. Iron Horns—Brass Sockets

| | | | |
|-----|--------|--------|--------|
| 1/2 | \$.... | \$.... | \$.... |
|-----|--------|--------|--------|



Prices on Application

BLACKBURN

Adapted for use on narrow gunwales; made of malleable iron, galvanized.

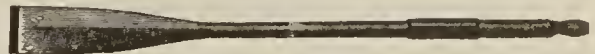
| No. 10—Size Between Horns, 2 3/4 Inches; Size of Plate, 1x10 Inches | Per Pair |
|---|----------|
| ..... | \$1.45 |

SPRUCE SCULLS



First quality; made of selected timber and free from all defects; plain straight blades.

| Length, Feet | Per Foot | Length, Feet | Per Foot |
|--------------|----------|--------------|----------|
| 5 | \$0.30 | 7 1/2 | \$0.30 |
| 5 1/2 | .30 | 8 | .30 |
| 6 | .30 | 8 1/2 | .30 |
| 6 1/2 | .30 | 9 | .30 |
| 7 | .30 | 10 | .30 |



EXTRA SPRUCE SCULLS

Made from selected white spruce; are copper tipped; leathered and finished with spar composition; furnished in either regular or taper handle.

| Length, Feet | Per Foot | Length, Feet | Per Foot |
|--------------|----------|--------------|----------|
| 6 | \$0.42 | 8 | \$0.42 |
| 6 1/2 | .42 | 9 | .42 |
| 7 | .42 | 10 | .42 |
| 7 1/2 | .42 | ... | ... |



EXTRA SPRUCE SPOON SCULLS

For pleasure boats; made from selected white spruce; coppered, leathered and varnished with spar composition; they are hand made and will give perfect satisfaction.

| Length, Feet | Per Foot | Length, Feet | Per Foot |
|--------------|----------|--------------|----------|
| 6 | \$0.55 | 8 | \$0.55 |
| 6 1/2 | .55 | 8 1/2 | .55 |
| 7 | .55 | 9 | .55 |
| 7 1/2 | .55 | 10 | .55 |

ASH OARS



First quality; made of selected white ash and free from all defects; with plain straight blades.

| Length, Feet | Per Foot | Length, Feet | Per Foot |
|--------------|----------|--------------|----------|
| 5 | \$0.23 | 8 | \$0.23 |
| 5½ | .23 | 8½ | .23 |
| 6 | .23 | 9 | .... |
| 6½ | .23 | 10 | .... |
| 7 | .23 | 11 to 24 | .... |
| 7½ | .23 | ..... | .... |

COPPER OAR TIPS

Made of soft copper; easily attached.

| | Per Pair |
|-------------------|----------|
| Copper Tips | \$0.30 |

CANOE PADDLES



SINGLE

Hand made of selected spruce or maple in the plain round end type and hand varnished; size of blade, 6½ inches.

| | Each |
|---------------------------------|--------|
| Single—Length, 4 to 6 Feet..... | \$2.00 |

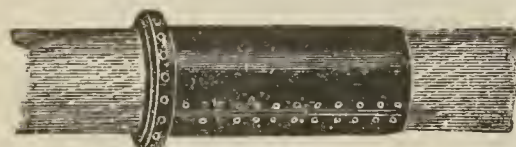


DOUBLE

Hand made double bladed canoe paddles in either spruce or maple; straight or spoon blades, nickel plated mountings.

| Length, Feet | Type, Blade | Each |
|--------------|-------------|--------|
| 9 to 10 | Straight | \$5.75 |
| 9 to 10 | Spoon | 8.75 |

OAR LEATHERS



Made of russet leather, furnished ready to attach, with necessary nails.

| | Per Pair |
|------------------------|----------|
| Size, 6x6 Inches | \$1.20 |

SERVING MALLETS

LIGNUMVITAE AND ASH

Used when rope is tightly and continuously wound with fine yarn, such as marline or spunyarn.

| Nos. | Diameter, Inches | Per Dozen | |
|------|------------------|-------------|--------|
| | | Lignumvitae | Ash |
| 1 | 2 | \$18.15 | \$7.43 |
| 2 | 2½ | 21.45 | 8.25 |
| 3 | 3 | 24.75 | 9.08 |



SERVING BOARDS

LIGNUMVITAE AND ASH

Used with serving mallets when rope is served.

| Nos. | Size, Inches | Per Dozen | |
|------|--------------|-------------|---------|
| | | Lignumvitae | Ash |
| 1 | 3¼x3¼ | \$21.45 | \$ 9.90 |
| 2 | 4 x4 | 24.75 | 11.55 |



HAND FIDS



HICKORY OR MAPLE

For use in splicing ropes and light flexible cables; has a rounded end for hand use; varnished finish.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 0 | 12x1¾ | \$4.95 |
| 1 | 14x1¾ | 5.94 |
| 2 | 16x2 | 6.60 |
| 3 | 18x2 | 7.43 |
| 4 | 20x2¼ | 14.85 |
| 5 | 24x3 | 19.70 |

STANDING FIDS



HICKORY OR MAPLE

Made of selected hickory or maple, turned; plain finish; for splicing of large hawsers.

| Nos. | Size, Inches | Per Dozen |
|------|--------------|-----------|
| 1 | 30x4 | \$44.55 |
| 2 | 32x5 | 59.40 |
| 3 | 36x6 | 89.10 |
| 4 | 40x6½ | 118.80 |

DOWELS



BIRCH OR HARD WOOD

| Nos. | Per 1000, Diameter, Inch | | | | | | | |
|------|--------------------------|--------|--------|--------|--------|--------|--------|--------|
| | ¾ | 1 | 1¼ | 1½ | 1¾ | 2 | 2½ | 3 |
| 12 | \$2.57 | \$2.80 | \$3.24 | \$3.76 | \$4.33 | \$5.13 | \$5.51 | \$6.73 |
| 16 | 3.43 | 3.73 | 4.35 | 5.06 | 5.73 | 6.80 | 7.31 | 9.05 |
| 18 | 3.84 | 4.17 | 4.93 | 5.66 | 6.51 | 7.67 | 8.27 | 10.17 |
| 21 | 4.47 | 4.89 | 5.78 | 6.61 | 7.59 | 9.00 | 9.65 | 11.83 |
| 24 | 5.09 | 5.60 | 6.56 | 7.51 | 8.67 | 10.27 | 11.03 | 13.53 |
| 27 | 5.72 | 6.32 | 7.37 | 8.48 | 9.09 | 11.53 | 12.33 | 15.25 |
| 30 | 7.08 | 7.71 | 8.97 | 10.32 | 11.84 | 14.00 | 14.79 | 18.44 |
| 33 | 7.77 | 8.48 | 9.92 | 11.36 | 13.05 | 15.40 | 16.49 | 20.28 |
| 36 | 8.47 | 9.27 | 10.80 | 12.40 | 14.20 | 16.80 | 18.00 | 22.13 |
| 42 | 9.85 | 10.84 | 12.63 | 14.48 | 16.57 | 19.60 | 21.03 | 25.84 |
| 48 | 11.31 | 12.33 | 14.37 | 16.56 | 18.93 | 20.40 | 23.97 | 29.53 |
| 54 | ..... | 17.17 | 18.87 | 21.43 | 25.97 | 30.60 | 32.67 | 40.11 |
| 60 | ..... | 20.87 | 21.43 | 24.71 | 31.40 | 37.00 | 39.43 | 48.33 |

| Nos. | Per 1000, Diameter, Inches | | | | | | | |
|------|----------------------------|---------|---------|---------|---------|---------|---------|----------|
| | ¾ | 1 | 1¼ | 1½ | 1¾ | 2 | 2½ | 3 |
| 12 | \$13.29 | \$17.43 | \$21.33 | \$32.00 | \$40.00 | \$53.00 | \$85.33 | \$106.61 |
| 16 | 19.08 | 23.24 | 28.00 | 40.00 | 53.00 | 69.33 | 106.67 | 143.67 |
| 18 | 21.40 | 26.13 | 32.00 | 48.00 | 60.00 | 80.00 | 128.00 | 160.00 |
| 21 | 24.99 | 30.49 | 40.00 | 56.00 | 70.00 | 93.33 | 156.00 | 186.67 |
| 24 | 28.57 | 34.84 | 48.00 | 64.00 | 80.00 | 106.67 | 170.67 | 213.33 |
| 27 | 32.11 | 39.20 | 53.33 | 72.00 | 88.00 | 120.00 | 186.67 | 240.00 |
| 30 | 39.03 | 47.56 | 58.67 | 80.00 | 96.00 | 133.33 | 192.00 | 266.67 |
| 33 | 42.88 | 52.32 | 64.67 | 93.33 | 106.67 | 143.67 | 234.67 | 293.33 |
| 36 | 46.80 | 57.00 | 72.53 | 106.67 | 117.33 | 160.00 | 256.00 | 320.00 |
| 42 | 54.57 | 66.57 | 80.00 | 117.33 | 128.00 | 186.67 | 298.67 | 346.67 |
| 48 | 62.43 | 76.11 | 96.00 | 149.33 | 149.33 | 213.33 | 341.33 | 373.33 |
| 54 | 85.07 | 103.60 | 133.33 | 170.67 | 192.00 | 240.00 | 384.00 | 426.67 |
| 60 | 93.51 | 125.11 | 186.67 | 213.33 | 234.67 | 266.67 | 426.67 | 480.00 |
| 66 | 128.56 | 140.89 | 213.33 | 240.00 | 266.67 | 293.33 | 469.33 | 533.33 |
| 72 | 133.41 | 162.13 | 240.00 | 266.67 | 293.33 | 320.00 | 512.00 | 586.67 |
| 78 | 139.55 | 187.60 | 256.00 | 293.33 | 320.00 | 346.67 | 554.67 | 640.00 |
| 84 | 145.68 | 219.13 | 266.67 | 320.00 | 346.67 | 373.33 | 597.33 | ..... |
| 96 | 157.99 | 240.19 | 320.00 | 341.33 | 373.33 | 426.67 | 682.67 | ..... |
| 108 | ..... | ..... | 373.33 | 384.00 | 426.67 | 480.00 | ..... | ..... |
| 120 | ..... | 270.21 | 426.67 | 426.67 | 480.00 | 533.33 | ..... | ..... |

DECK PLUGS



Used to cover the holes made by nails, screws and bolts after these have been countersunk, so as to preserve them from rusting; furnished to match the grain and color of the trim in white pine, yellow pine, oak, mahogany and teak.

| Size, Inches | White Pine | Yellow Pine | Oak, Ash, Cypress | Mahogany | Teak |
|--------------|------------|-------------|-------------------|----------|--------|
| 1/4 | ..... | ..... | ..... | ..... | ..... |
| 1/2 | ..... | ..... | ..... | ..... | ..... |
| 3/8 | \$1.70 | \$2.90 | \$3.00 | \$3.40 | \$5.00 |
| 1/2 | 1.90 | 3.00 | 3.20 | 3.90 | 7.00 |
| 5/8 | 2.50 | 4.00 | 3.40 | 4.80 | 8.00 |
| 3/4 | 2.80 | 5.30 | 4.00 | 6.00 | 14.00 |
| 7/8 | 2.90 | 6.00 | 4.60 | 7.20 | 20.00 |
| 1 | 3.00 | 7.20 | 5.40 | 9.00 | 24.00 |
| 1 1/8 | 3.90 | 7.60 | 7.20 | ..... | 30.00 |
| 1 1/4 | 4.40 | 8.40 | 7.50 | ..... | 36.00 |

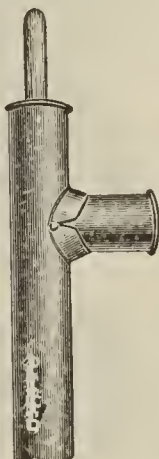
WIZARD BILGE PUMP

GALVANIZED

Style 344

Wood rod and leather plunger. Galvanized iron clapper valve.

| Length Over-All, Feet | Diameter of Pump, Inches | | | | |
|-----------------------|--------------------------|--------|--------|--------|--------|
| | 2 | 2 1/2 | 3 | 3 1/2 | 4 |
| 2 | \$2.25 | \$2.70 | \$3.00 | ..... | ..... |
| 2 1/2 | 2.35 | 2.70 | 3.00 | ..... | ..... |
| 3 | 2.50 | 2.90 | 3.00 | \$3.30 | ..... |
| 3 1/2 | 2.65 | 3.00 | 3.10 | 3.30 | \$3.60 |
| 4 | 2.75 | 3.00 | 3.20 | 3.40 | 3.70 |
| 4 1/2 | 2.85 | 3.10 | 3.30 | 3.50 | 3.80 |
| 5 | 2.95 | 3.20 | 3.40 | 3.65 | 3.90 |
| 6 | 3.40 | 3.80 | 4.00 | 4.40 | 4.70 |



BOAT PUMPS

GALVANIZED

Style 158

With iron rod and handle, improved oak leather disc plunger. Galvanized iron valve and top cap.

| Diam., Inches | Length, Feet | Each | Diam., Inches | Length, Feet | Each |
|---------------|--------------|--------|---------------|--------------|--------|
| 1 1/2 | 2 | \$1.90 | 2 | 3 1/2 | \$2.40 |
| 1 1/2 | 2 1/2 | 1.90 | 2 | 4 | 2.70 |
| 1 1/2 | 3 | 2.15 | 2 | 5 | 2.90 |
| 1 1/2 | 3 1/2 | 2.30 | 2 | 6 | 3.25 |
| 1 1/2 | 4 | 2.60 | 2 1/2 | 3 | 2.50 |
| 1 1/2 | 5 | 2.80 | 2 1/2 | 3 1/2 | 2.70 |
| 1 1/2 | 6 | 3.15 | 2 1/2 | 4 | 3.00 |
| 2 | 2 1/2 | 2.00 | 2 1/2 | 5 | 3.25 |
| 2 | 3 | 2.25 | 2 1/2 | 6 | 3.75 |

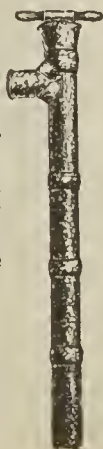
EXTRA HEAVY

Style 156

Used as a bilge or boat pump, but also will be found to operate successfully on other applications as a regular hand suction pump.

Made of galvanized sheet iron, with reinforced banded joints; cast iron clapper valve; leather plunger; steel plunger rod with wooden handle; in any lengths; pumps shorter than 5 feet take the price of a 5-foot pump

| Diameter, Inches | Per Foot |
|------------------|----------|
| 2 | \$0.60 |
| 2 1/2 | .65 |
| 3 | .70 |
| 3 1/2 | .75 |
| 4 | .80 |



PUMP VALVES

SINGLE

Used in connection with galvanized bilge and boat pumps; has galvanized iron frame and leather clapper on the 1 1/2 and 2 inch sizes and rubber clapper on the larger sizes.



| Size, Inches | Per Dozen | Size, Inches | Per Dozen |
|--------------|-----------|--------------|-----------|
| 1 1/2 | \$2.75 | 3 | \$4.50 |
| 2 | 3.25 | 3 1/2 | 5.50 |
| 2 1/2 | 4.00 | 4 | 6.50 |

PUMP PLUNGERS

Used in connection with galvanized boat or bilge pumps; are carefully constructed from a uniform selection of oak leather which is suitable for the purpose; with brass tubular rivets and burrs.

| Size, Inches | Per Dozen | Size, Inches | Per Dozen |
|--------------|-----------|--------------|-----------|
| 2 | \$2.60 | 3 1/2 | \$4.80 |
| 2 1/2 | 3.30 | 4 | 5.60 |
| 3 | 4.00 | 4 1/2 | 8.00 |



BILGE PUMPS

SINGLE HOSE

Style 6669

Compact design; sturdy and well made; double action; made entirely of brass; has a strainer base; furnished complete with a 5-foot length of discharge hose.

| Size, Nos. | Height, Inches | Diameter, Inches | Capacity per Minute, Gallons | Each |
|------------|----------------|------------------|------------------------------|--------|
| 1 | 16 | 1 1/8 | 6 | \$3.25 |
| 2 | 17 | 1 1/2 | 12 | 4.00 |
| 3 | 26 | 1 1/8 | 8 1/2 | 4.25 |
| 4 | 26 | 1 1/2 | 16 1/2 | 5.00 |

Add for side handle, \$0.60 each.

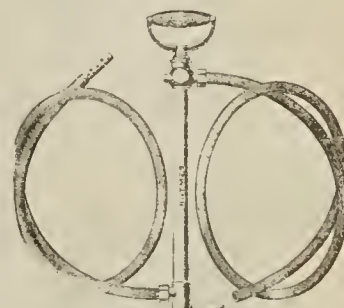
WITH SUCTION HOSE STRAINER AND FOOT PIECE

Style 6671

Suction hose may be carried to parts of the bilge not easily accessible with the ordinary pump.

Made entirely of brass; furnished with a 5-foot length of discharge hose and a 5-foot length of suction hose with suction strainer in end of hose.

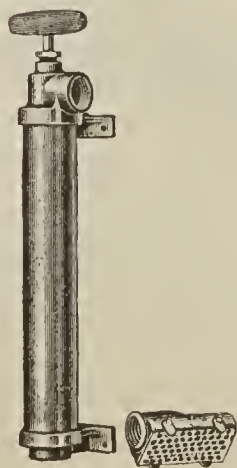
| Size, Nos. | Height, Inches | Diameter, Inches | Capacity per Minute, Gallons | Each |
|------------|----------------|------------------|------------------------------|--------|
| 5 | 16 | 1 1/8 | 6 | \$5.25 |
| 6 | 17 | 1 1/2 | 12 | 6.00 |
| 7 | 26 | 1 1/8 | 8 1/2 | 6.50 |
| 8 | 26 | 1 1/2 | 16 1/2 | 7.50 |



NAVY PATTERN

Built to stand hard usage and to be positively fool proof. Nothing can get out of order. Has 1 1/4 inch pipe size supply and 1 1/2 inch discharge. May be installed against the bulkhead for either port or starboard outlet, in the most convenient position to be ready any time. Is a standard equipment of all navy motor sailors. Furnished in rough finish. Length, 23 inches; diameter, 2 3/4 inches.

| | |
|--|--------|
| No. 176 — Complete with Heavy Cast Brass Strainer; | |
| Weight Each, 9 Lbs..... | \$9.00 |
| Brass Strainer Only | 1.50 |
| Brass Nipple for Supply, 1 1/4 x 3 1/2 Inches | .50 |
| Brass Nipple for Discharge, 1 1/2 x 3 1/2 Inches | .60 |



BRASS YACHT PUMP

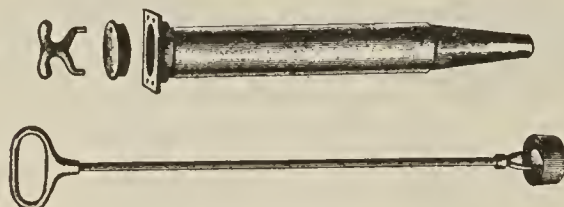


Fig. B-4550

| Size Nos. | Diameter Cylinder, Inches | Length Under Plate, Inches | Plate (Ask. for Screw Number) | Price, Each |
|-----------|---------------------------|----------------------------|-------------------------------|-------------|
| 1 | 2 | 16 | 10 | \$10.00 |
| 2 | 2½ | 22 | 12 | 12.00 |
| 3 | 3 | 26 | 12 | 16.00 |
| 4 | 3½ | 28 | 14 | 21.00 |

UNIVERSAL—DOUBLE-ACTING

Double acting pumps for lifting and forcing water, oil or gasoline easily and rapidly. Simple in construction, and light in weight.

The round case which contains the wing gear and two valves is closed with a face plate, secured with six screws that can be easily removed for inspection if necessary. Make ideal bilge pumps, mounting on bulkhead or siding. Oscillating handle action. Without the use of foot valve and strainer, these pumps will lift 25 feet vertically and deliver as high as 90 feet. Red finished with varnished hardwood handle.



| Nos. | Inside Diam. of Pipes, Inches | Size Case, MM | Capacity per Minute, Gallons | Weight Each, Lbs. | Each |
|------|-------------------------------|---------------|------------------------------|-------------------|--------|
| 0 | ½ | 90x55 | 4½ | 11 | \$9.60 |
| 1 | ¾ | 105x55 | 6¾ | 13 | 10.80 |

Prices on Larger Sizes, Upon Application

GARBOARD DRAIN PLUG

CAST BRONZE

A few of these installed in garboard allows quick drainage of boat when hauled out, by removing heavy plug. Complete with wrench for removing plug, tapered thread, 1-in. pipe size. Absolutely water-tight.

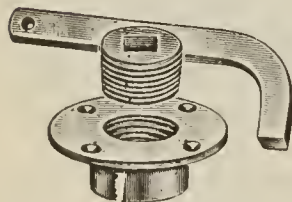


Fig. 124

| Diam. Flange, Inches | Depth, Inches | Weight, Ounces | Complete with Wrench, Each |
|----------------------|---------------|----------------|----------------------------|
| 2¾ | 1 | 10 | \$1.25 |

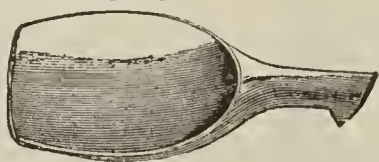
BOAT SCOOPS

WOOD

Usually cut from clear maple stock.

Per Dozen

Length, 13½ Ins...\$8.00



AUTOMATIC BOAT DRAINS

FOR LIFE BOATS

Made of cast brass, plain; equipped with ball valve; screw plug has chain with ring.



| Nos. | Diameter Flange, Inches | Diameter Opening, Inches | Each |
|------|-------------------------|--------------------------|--------|
| 4148 | 2¼ | ¾ | \$2.00 |
| 4149 | 3½ | 1¼ | 2.50 |

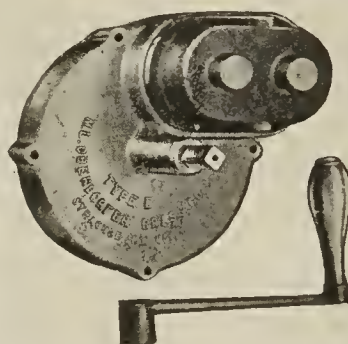
Extra Ball Valves. .15

Note: Caps only can be furnished to order.

HAND BILGE PUMPS

OBERDORFER

Recommended for bilge pumping on smaller crafts, where the proper electrical current is not available; can also be used for fuel oil or wherever liquids are to be moved in limited quantities. Has a capacity of 7 gallons per minute by 100 revolutions. Entire pump is non-corrosive and requires no extra bracket for attachment.



Pump housing and all moving parts are made of bronze. Handle is detachable and may be stored at convenience.

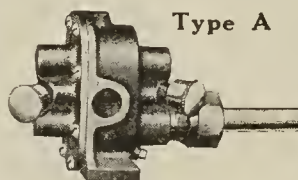
| No. | Size Pipe Connection, Inch | Height, Inches | Weight Each, Lbs. | Each |
|-----|----------------------------|----------------|-------------------|---------|
| 1 | 1 | 14 | 15½ | \$24.00 |

BRONZE GEAR PUMPS

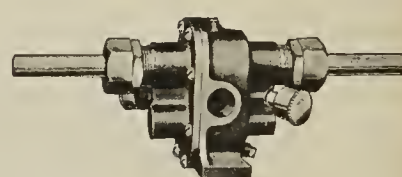
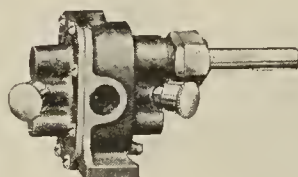
SPUR

Type A

Type B



Form Y



Form X

Used largely for pumping oil and circulating water on gasoline motors, pumping fuel oil and many other applications where hot or cold liquid is to be positively moved in a steady, reliable manner; positive in action, giving a forced circulation; pumps in proportion to the speed at which it revolves; may be operated by pulley and belt, sprocket and chain or direct gear drive; side inlet and outlet threaded for standard pipe thread; has Tobin bronze shaft with gland follower, which prevents any possible leakage. Pumps can be operated vertical or horizontal and spur gears can be driven either clockwise or counter clockwise.

| Nos. | Pipe Connections Inches | Capacity—gallons per 100 revolutions | Weight, Lbs. | Spur Gear | Weight, Lbs. | Spur Gear |
|------|-------------------------|--------------------------------------|--------------|-----------|--------------|-----------|
| 1½ | 1½ | .121 | 2½ | \$8.25 | 2¾ | \$8.80 |
| 2 | 1¼ | .233 | 3½ | 9.00 | 4¼ | 10.20 |
| 3 | ¾ | .383 | 5 | 10.50 | 6 | 11.25 |
| 4 | 1½ | .566 | 5¾ | 11.25 | 6½ | 12.40 |
| 7 | ¾ | 1.033 | 8 | 13.75 | 8¾ | 14.85 |
| 9 | 1 | 1.350 | 8½ | 14.85 | 9¼ | 15.95 |
| 11 | 1¼ | 2.640 | 18 | 44.00 | 22 | 47.30 |
| 13 | 1½ | 3.600 | 22 | 55.00 | 26 | 57.20 |

*Based on 10 pounds discharge pressure at pump.

DIMENSION TABLE

| Nos. | Height Overall, Inches | Width Base, Inches | Height Shaft Center to Base | | Length Overall (Including Shaft) | | Diam. Shaft Inch |
|---------|------------------------------|--------------------------|--------------------------------|--------|-------------------------------------|---------|------------------------|
| | | | —Inches— | | —Inches— | | |
| | | | Form Y | Form X | Type A | Type B | |
| 1½ | 2 7⁄8 | 2 1⁄4 | 1 1⁄8 | 1 7⁄8 | 6 1⁄16 | 9 1⁄2 | 3⁄8 |
| 2 | 3 1⁄2 | 2 7⁄8 | 1 1⁄8 | 2 3⁄8 | 6 1⁄8 | 9 7⁄8 | 1⁄2 |
| 3, * 4 | 4 | 3 1⁄2 | 1 1⁄8 | 2 5⁄8 | 6 1⁄8 | 10 3⁄4 | 5⁄8 |
| 7 | 5 3⁄16 | 4 | 1 9⁄16 | 3 9⁄16 | 7 1⁄8 | 11 1⁄8 | 5⁄8 |
| 9 | 5 5⁄16 | 4 | 1 9⁄16 | 3 9⁄16 | 7 1⁄8 | 10 5⁄16 | 5⁄8 |
| 11, *13 | 6 1⁄2 | 5 | 2 1⁄8 | 4 3⁄8 | 12 | 18 | 1 |

*No. 4 has wider base; No. 13 is ⅞ inch longer.

PUMP PULLEYS

OBERDORFER

Vee grooved, gray iron pulleys for use with bilge pumps. Do not slip like flat belt pulleys and are better for short drives.

| Diam., Inches | Bore, Inches | Each |
|------------------|---------------------------------|--------|
| 3 | $\frac{3}{8}$ to $\frac{3}{4}$ | \$1.00 |
| 4 | $\frac{1}{2}$ to $\frac{3}{4}$ | 1.50 |
| 5 $\frac{1}{4}$ | $\frac{7}{16}$ to $\frac{3}{4}$ | 2.00 |

GEAR PUMP COUPLING

FLEXIBLE

For use on magneto or generator drives and for direct connecting motors and bilge or water pumps. Constructed to allow slight mis-alignments in any direction.

| | Bore | OD | Length | Each |
|---|--------------------------------|-----------------|-----------------|--------|
| 1 | $\frac{3}{8}$ to $\frac{1}{2}$ | 1 $\frac{7}{8}$ | 1 $\frac{7}{8}$ | \$1.00 |
| 2 | $\frac{3}{8}$ to $\frac{3}{4}$ | 2 $\frac{1}{8}$ | 1 $\frac{7}{8}$ | 1.50 |



POWER BILGE PUMPS

STAR

A compact, strong and effective water pump; operated by cam attachment to the shaft.

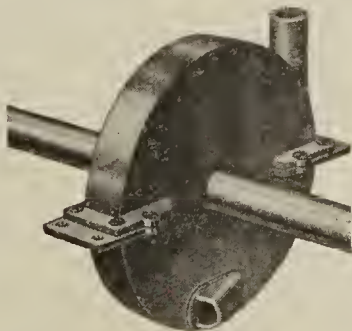
Made with iron body with brass cylinder and plunger or all brass; cams and bushings on both are iron; has a brass strainer for the intake end; recommended for use with heavy duty or slow turning

engines; cams are carried in stock bored to fit shaft sizes $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$, 1 $\frac{3}{8}$, 1 $\frac{1}{2}$, 1 $\frac{5}{8}$, 1 $\frac{3}{4}$, 1 $\frac{7}{8}$, 2, 2 $\frac{1}{4}$ inches.

| No. | For Shafts Size, Inches | Body | Each |
|-----|----------------------------------|-------|---------|
| 60 | $\frac{5}{8}$ to 1 $\frac{1}{2}$ | Iron | \$15.00 |
| 62 | $\frac{5}{8}$ to 1 $\frac{1}{2}$ | Brass | 18.00 |
| 64 | 1 $\frac{1}{4}$ to 3 | Iron | 28.00 |
| 66 | 1 $\frac{1}{4}$ to 3 | Brass | 31.50 |

BEARINGLESS PROPELLER SHAFT BILGE PUMPS

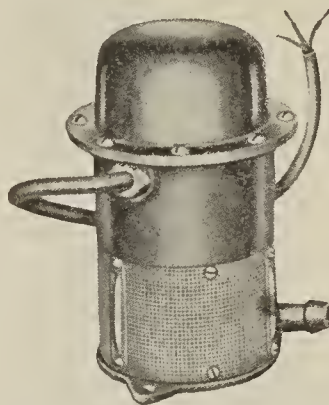
The ideal Bilge Pump for every type of boat. Made in two halves, it can be installed without moving the propeller shaft. Locate the pump as near the bottom of the boat as possible. Adjust the pump housing on brackets or bed plate so that it does not touch the shaft or pump vanes. When ordering state diameter of shaft on which the pump will be mounted.



| Size, Inches | Distance from Center of Shaft to Bottom of Boat, Inches | Size of Outlet Pipe, Inches | Capacity, in Gallons, per Hour | Each |
|-----------------|--|--------------------------------------|---|---------|
| 5 | 3 | $\frac{1}{2}$ | 360 | \$13.00 |
| 8 | 4 $\frac{3}{8}$ | $\frac{1}{2}$ | 450 | 15.00 |
| 12 | 6 $\frac{1}{4}$ | $\frac{3}{4}$ | 900 | 20.00 |

AUTOMATIC BILGE PUMP

OBERDORFER
ELECTRIC



An exceptionally sturdy complete pumping outfit. A protection to a boat as well as a convenience. All outer castings are made of non-corrosive cast bronze. Motor and mercury switch are enclosed in a diving bell housing preventing flooding and damage. Automatic in action, the pump starting and stopping according to the height of water in the bilge. Constant action if desired. Remote control by a small dual switch at convenient

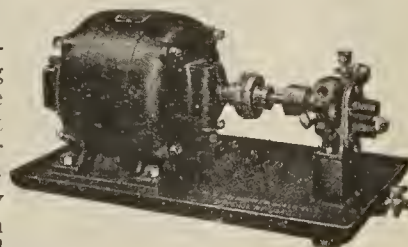
point. Furnished for either 6, 12 or 32 volts. Has capacity of 400 gallons per hour. Height overall, 9 $\frac{1}{2}$ inches. Size of base, 6 inches square.

Each
Weight Each, 10 Lbs. \$50.00

MOTOR DRIVEN GEAR PUMPS

OBERDORFER

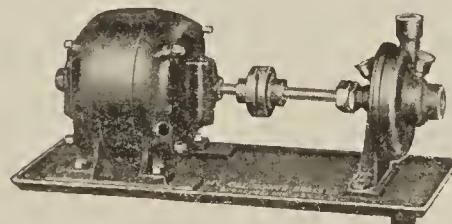
A compact and powerful all-purpose pumping outfit with both pressure and suction ability. It consists of an Oberdorfer Gear Pump of non-corrosive bronze directly connected with high grade electric motor and mounted on a cast iron base. Used for galley and lavatory water supply, deck flushing, fuel pumping, fire use, bilge pumping, etc. Self priming. Following prices for 110 volt 60 cycle A.C. and 32 and 115 Volt D.C. Prices on application for motors of other current characteristics.



| Pump | Weight Lbs. | Length, Inches | Width, Inches | Height, Inches | H.P. Motor | Size Pipe Con., Inches | Price A.C. 110V-60C | D.C. 32-115V |
|--------------|----------------|-------------------|------------------|-------------------|---------------|------------------------------|---------------------------|-----------------|
| Junior | 39 | 14 $\frac{1}{2}$ | 8 $\frac{1}{2}$ | 6 $\frac{1}{2}$ | 1/6 | $\frac{1}{4}$ | \$55.00 | \$65.00 |
| Little Giant | 43 | 17 | 8 $\frac{1}{2}$ | 8 | 1/3 | $\frac{3}{8}$ | 100.00 | 91.00 |
| Giant | 90 | 22 $\frac{1}{2}$ | 10 | 10 $\frac{1}{4}$ | 1/2 | $\frac{3}{4}$ | 114.00 | 105.00 |
| Super Giant | 120 | 22 $\frac{1}{2}$ | 10 | 10 $\frac{1}{4}$ | 3/4 | 1 | 139.00 | 139.00 |

MOTOR DRIVEN CENTRIFUGAL PUMPS

OBERDORFER



Ideally suited for handling dirty bilge water without undue wear; simple, compact and most economical. Located below the water line, they are also well

suited for use as fire pumps, for flushing decks, etc. Made in two sizes. Pumps and motors are direct connected by means of a flexible joint and mounted on cast iron bases. Pump is made of non-corrosive bronze with open impellers so that pump will handle a percentage of solids. Outlet connection can be moved to any angle by simply loosening screws. Following prices for 110 volt 60 cycle A.C. and 32 and 115 volt D.C. Prices on application for motors of other current characteristics.

| Pump | Speed | Horse- Power | In- let | Out- let | Wgt. | Length Inches | Width Inches | Height Inches | Price A.C. 110V-60C | D.C. 32-115V |
|------|-------|-----------------|-----------------|---------------|------|------------------|-----------------|------------------|---------------------------|-----------------|
| 4G | 1725 | $\frac{1}{4}$ | $\frac{3}{4}$ | $\frac{1}{2}$ | 36 | 15 $\frac{1}{2}$ | 7 $\frac{1}{2}$ | 8 | \$44.65 | \$64.50 |
| 4G | 3450 | $\frac{1}{4}$ | $\frac{3}{4}$ | $\frac{1}{2}$ | 36 | 15 $\frac{1}{2}$ | 7 $\frac{1}{2}$ | 8 | 59.35 | 68.00 |
| 9G | 1725 | $\frac{1}{4}$ | 1 $\frac{1}{4}$ | 1 | 43 | 18 | 8 | 8 | 47.65 | 67.00 |

PRESSURE WATER SYSTEM

OBERDORFER

This water system is especially constructed for use on boats for supplying fresh water under pressure to bathroom, galleys, and for showers. Entirely automatic in operation, the turn of a faucet supplies water without a thought to any detail except keeping fresh water tanks full.

This unit has herringbone gears and is rubber mounted making quiet and efficient pump. Can be installed together as shown or tank in some remote place. Pump can be used for house or cottage as well as on board boat. Following prices cover complete unit ready to install with 110 volt 60 cycle also 32 and 115 volt DC motors. Units with other current characteristics quoted on request.

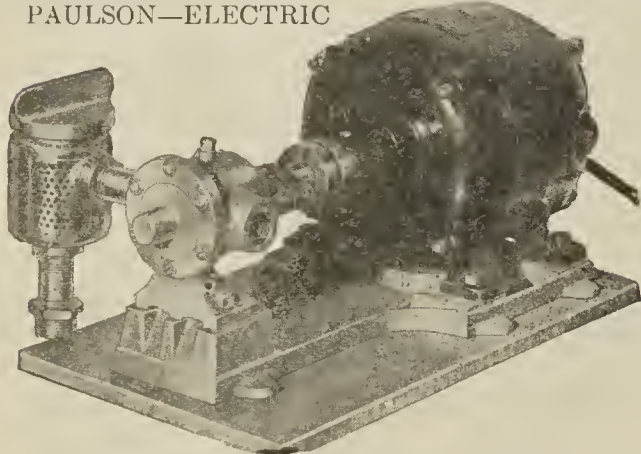


| Nos. | Capacity Gal. per Hr. | Tank Size | App. Wt. | Price Complete | |
|----------|--------------------------|--------------|-------------|-----------------------|-------------------|
| | | | | AC 115 Volt 60 cy. | DC 32-115 Volt |
| SC25-5 | 250 | 5 | 70 | \$65.00 | \$78.50 |
| SC25-15 | 250 | 15 | 94 | 73.50 | 87.00 |
| SC25-42 | 250 | 42 | 141 | 80.00 | 93.50 |
| SC25-120 | 250 | 120 | 254 | 93.00 | 106.50 |

* Please Specify What Voltage When Ordering

ROTARY PUMPS

PAULSON—ELECTRIC



Pump with cover removed to show construction

Adapted for marine service for clearing the bilge and general service, pumping water or oils. Inlet strainer excludes all large foreign matter from entering the pump. Small particles can pass through the pump without trouble. The strainer may be opened and cleaned in a moment without tools.

All parts are of bronze including the base. The pump itself consists of five moving parts which are self compensating for wear and silent in action. Fitted with Westinghouse Micarta vanes.

Furnished with a ¼ H.P. special marine type G.E. motor for 32 or 110 volts. Motors of other voltages can be supplied on special orders.

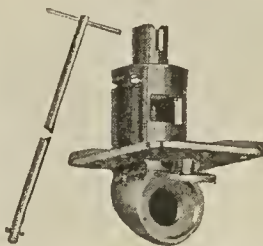
Entire unit is mounted on webbed bronze base. A small air chamber is fitted in top of the pump, making for smoother operation. Out lasts any gear pump.

| Nos. | Size Pipes, Inch. | Size Base, Inches | Height, Inches | Capac. Gals. | Min. Lift. per Min. | Weight, Lbs. | Each |
|------|-------------------------|-------------------------|-------------------|-----------------|---------------------------|-----------------|---------|
| | | | | R. P. M. | Feet | | |
| 5G | ¾ | 17 x 8 | 7½ | 1725 | 5 | 7 37 | \$90.00 |
| 12G | 1 | 16½x11 | 11 | 335 | 12 | 7 57 | 140.00 |

AUTOMATIC BOAT BAILERS

ST. CLAIR

For Displacement Boats



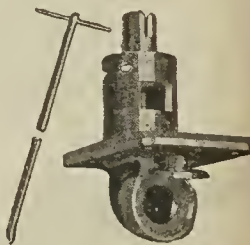
Bails out a boat automatically at a speed of 6 miles per hour or faster. Valve operates automatically with starting or stopping of boat. A sleeve is also provided which can be closed when leaving boat for any length of time, by a quarter turn of control handle.

All bronze construction; can be installed easily. Height overall without handle, 5¼ to 7¼ inches; with 1⅞ inch barrel. Bottom plate, 3½x6 inches. Furnished in standard and heavy duty models; both identical in design except the underneath projection body and flap are larger in the heavy duty model, giving greater suction on deep draft boats and on shallow draft boats of slow speed.

| For Planking, Thickness, up to Inches | Standard Model, Each | Heavy Duty Model Each |
|---|----------------------------|-----------------------------|
| 1⅞ | \$12.50 | \$16.00 |
| 1½ | 14.00 | 17.00 |
| 2 | 15.00 | 18.00 |
| 2½ | 16.00 | 19.00 |
| 3 | 17.00 | 20.00 |

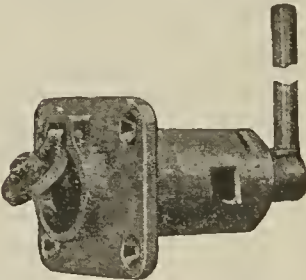
OUTBOARD MODEL

Specially made for stepless outboard boats. Requires a 1¼ inch hole; for planking ⅝ to ⅞ inch; has a 2x2½ inch bottom plate. Regularly furnished with 6-inch tee handle, but longer handle or a remote control for dash or foot operation can be furnished.



| | |
|---|--------|
| Outboard Model—Weight Each, 1 Lb. | \$8.00 |
| Remote Control—Dash or Foot Operated..... | 4.00 |

HYDROPLANE MODEL



Installed in the step it operates through the vacuum created aft of the step; gives complete drainage. Requires a 1¼ inch hole in step; outside plate, 2x2½ inches. Takes up to 1¼ inch. With 6 inch handle.

| | |
|--|--------|
| Hydroplane Model—Weight Each, ⅞ Lb. | \$5.00 |
|--|--------|

“SI-FUN” MODEL
Full Automatic

Has an automatic check valve, a special feature of the vacuum producer. Constructed entirely of bronze (no rubber hose or clamps) and secured to planking by a large flanged nut. Made on telescopic tube principles which permits radius, swivel, height adjustment or removal of gooseneck. The gooseneck extending above the water line prevents water from backing up into boat.



FOR OUTBOARDS AND SMALL RUNABOUTS
Size S-8 designed for boats whose maximum draft at point of Self-Bailer installation does not exceed 8 inches. Minimum operating speed 12 M. P. H.

| | |
|----------------------|---------|
| Price Complete | \$10.00 |
|----------------------|---------|

Size S-12 for boats whose draft at Self-Bailer is from 8 to 12 inches. Minimum operating speed 14 M. P. H.

| | |
|----------------------|---------|
| Price Complete | \$10.00 |
|----------------------|---------|

FOR STANDARD RUNABOUT

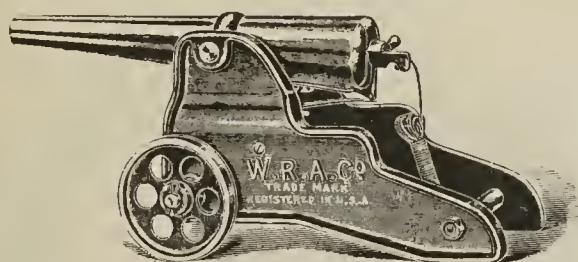
Size R-8 has larger torpedo vacuum producer for craft whose draft at Self-Bailer does not exceed 8 inches. Minimum operating speed 12 M. P. H.

| | |
|----------------------|---------|
| Price Complete | \$15.00 |
|----------------------|---------|

Size R-12 for boats whose draft at Self-Bailer is from 8 to 12 inches. Minimum operating speed 14 M. P. H.

| | |
|----------------------|---------|
| Price Complete | \$15.00 |
|----------------------|---------|

YACHT CANNONS



For yacht and club house use. Breech loading. Uses ordinary 10 gauge blank shot gun shells. Mounted on a shapely, cast iron carriage. Dimensions, 17 inches long, 7 1/4 inches high, 7 1/4 inches wide.

Cannon only Each \$25.00
Blank 10 gauge shells, per box of 25..... 1.25

FLAG POLES

MAPLE—ONE PIECE

Made of best quality maple, highly polished; mounted with solid turned balls.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 3/4x30 | \$0.50 | 1 1/4x48 | \$1.10 |
| 1 x36 | .80 | 1 1/2x60 | 1.30 |

MAHOGANY—SOLID TYPE

Of one piece solid mahogany of the best quality, highly polished; mounted with solid turned balls.

| Length, Feet | Each | Length, Feet | Each |
|--------------|--------|--------------|--------|
| 1 1/2x 3/4" | \$1.00 | 4x1 1/4" | \$2.50 |
| 2 x1" | 1.25 | 5x1 1/4" | 3.10 |
| 3 x1" | 1.85 | ..... | .... |

SWING FREE SWIVELS

Avoids winding around pole of flag; furnished to fit sockets from 1 to 1 1/2 inches; made of best quality maple, highly polished.

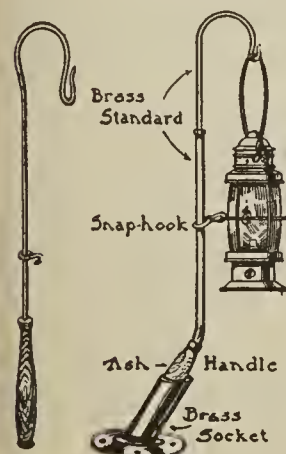
| Nos. | For Sockets, Inches | For Flags, Inches | Each |
|------|---------------------|-------------------|--------|
| 0 | 1 | 12 to 15 | \$1.50 |
| 1 | 1 1/4 and 1 1/2 | 12 to 18 | 1.90 |
| 2 | 1 1/4 and 1 1/2 | 20 to 24 | 2.25 |

LANTERN HOLDERS

GOOSE NECK

Made in galvanized iron and polished brass with ash handles; for use on runabouts and other small open boats.

| Nos. | Hgt. Overall, Ins. | Handles Fit Socket, Ins. | Each |
|------|--------------------|--------------------------|--------------|
| 1 | 32 | 1, 1 1/4, 1 1/2 | \$1.90 |
| 2 | 40 | 1, 1 1/4, 1 1/2 | 3.00 |
| 10 | 32 | 1, 1 1/4, 1 1/2 | \$1.50 |
| 20 | 40 | 1, 1 1/4, 1 1/2 | 2.65 |



Bow Stern

FLAG POLE BALLS
WITH SWIVELS

Style 6631

Wood balls, gold leafed with genuine gold leaf mounted on spindles with swivels mounted on top.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 2 | \$1.50 | 4 | \$3.55 |
| 2 1/2 | 2.05 | 5 | 4.00 |
| 3 | 2.50 | 6 | 4.50 |
| 3 1/2 | 3.00 | ..... | .... |



FLAG POLE BALLS

PLAIN

Wood and copper balls, gold leafed with genuine gold leaf mounted on iron spindles.

| Size, Inches | Each Wood | Size, Inches | Each, Copper |
|--------------|-----------|--------------|--------------|
| 1 1/2 | \$0.40 | 5 | \$4.50 |
| 2 | .70 | 6 | 6.00 |
| 2 1/2 | .90 | 7 | 9.00 |
| 3 | 1.20 | 8 | 11.25 |
| 3 1/2 | 1.50 | 9 | 12.40 |
| 4 | 1.90 | 10 | 15.00 |
| 5 | 3.00 | 12 | 24.00 |
| 6 | 4.50 | 14 | 37.50 |

MAST HEAD TRUCKS

LIGNUM-VITAE

Fitted with holes or with brass sheaves. Polished.



| Size, Inches | Two Holes | Each One Brass Sheave | Two Brass Sheave |
|--------------|-----------|-----------------------|------------------|
| 3 | \$0.80 | \$1.00 | \$1.30 |
| 3 1/2 | .90 | 1.20 | 1.60 |
| 4 | 1.10 | 1.40 | 1.88 |
| 4 1/2 | 1.30 | 1.70 | 2.20 |
| 5 | 1.50 | 2.00 | 2.60 |
| 5 1/2 | 1.80 | 2.30 | 3.00 |
| 6 | 2.20 | 2.70 | 3.50 |
| 7 | 3.00 | 3.60 | 4.50 |
| 8 | 4.00 | 4.70 | 5.70 |

AMERICAN ENSIGNS

STERLING AND DEFIANCE

Sterling grade flags are made of best double warp wool. Defiance grade is two ply bunting, all are sewed and finished throughout in first class manner. Stars have edges turned under and are stitched from both sides. Sizes up to 8x12 feet have canvas headings and grommets, 10x15 feet and larger have heavy canvas headings and ropes.



| Size, Feet | Each Sterling | Each Defiance | Size, Feet | Each Sterling | Each Defiance |
|------------|---------------|---------------|------------|---------------|---------------|
| 2 x3 | \$2.72 | \$2.00 | 6x10 | \$15.00 | \$9.20 |
| 2 1/2x4 | 3.60 | 2.60 | 8x12 | 23.00 | 13.80 |
| 3 x5 | 5.00 | 3.20 | 10x15 | 37.80 | 20.80 |
| 4 x6 | 7.00 | 4.60 | 10x19 | 48.00 | 24.00 |
| 4 x7 | 8.00 | 5.00 | 12x20 | 60.00 | 31.50 |
| 5 x8 | 11.00 | 6.80 | 15x25 | 90.00 | 48.00 |

U. S. JACKS

Correct number of stars sewed on both sides; strong canvas headings with nickel plated grommets. Sterling grade made of best quality blue wool. Defiance of three ply bunting; white stars sewed and finished throughout in first class manner.



| Size, Feet | Each Sterling | Each Defiance | Size, Feet | Each Sterling | Each Defiance |
|-------------|---------------|---------------|------------|---------------|---------------|
| 1 x1 1/2 | \$2.40 | \$1.80 | 4x 6 | \$8.00 | \$6.40 |
| 1 1/2x2 | 2.80 | 2.20 | 5x 7 | 12.00 | 9.60 |
| 1 3/4x2 1/2 | 3.40 | 2.60 | 6x 8 | 16.00 | 13.00 |
| 2 x3 | 3.80 | 3.00 | 7x10 | 23.00 | 18.00 |
| 3 x4 | 5.60 | 4.40 | 8x12 | 30.00 | 24.00 |
| 4 x5 | 7.00 | 5.60 | ..... | ..... | ..... |

YACHT ENSIGNS



STERLING AND DEFIANCE

Sterling grade made of best grade all wool bunting. Defiance grade of mixed two ply bunting; stars and anchor stitched on both sides. Have strong canvas headings with brass grommets.

| Size, Feet | Each | | Size, Feet | Each | |
|---------------|----------|----------|---------------|----------|----------|
| | Sterling | Defiance | | Sterling | Defiance |
| 1 x 1½ | \$2.00 | \$1.40 | 4x 6 | \$7.00 | \$4.60 |
| 1½x2 | 2.40 | 1.60 | 4x 7 | 8.00 | 5.00 |
| 1¾x2½ | 2.60 | 1.80 | 5x 8 | 11.00 | 6.40 |
| 2 x 3 | 2.80 | 2.00 | 6x10 | 15.00 | .... |
| 2½x4 | 3.60 | 2.60 | 8x12 | 23.00 | .... |
| 3 x 5 | 5.00 | 4.20 | .... | .... | .... |

Prices of Defiance Sizes 6x10 and 8x12;
Upon Application

OWNERS PRIVATE FLAGS

Made of high grade bunting; strong canvas headings and brass grommets.

The private signal which designates the owner of the yacht is flown as follows: At masthead or fore-stay by cat-rigged yachts.



At mizzen mast-head by yawl-rigged yachts.

At masthead (when cruising in squadron) by sloop-rigged and cutter-rigged yachts.

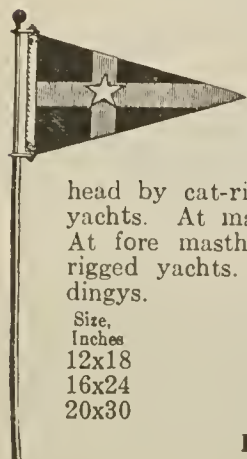
At main masthead by steam and schooner-rigged yachts.

At bowstaff by launches, gigs and dingys.

| Size, Inches | Each, Wool | Size, Inches | Each, Wool |
|-----------------|---------------|-----------------|---------------|
| 12x18 | ... | 24x36 | ... |
| 16x24 | ... | 32x48 | ... |
| 20x20 | ... | 40x60 | ... |

Prices On Application

YACHT CLUB SIGNALS



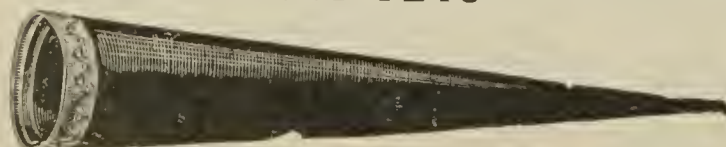
Made of high grade bunting; strong canvas headings and brass grommets. The club burgee, which indicates to which club the owner of the yacht belongs, is flown as follows: at mast-

head by cat-rigged, sloop-rigged and cutter-rigged yachts. At main masthead by yawl rigged yachts. At fore masthead by steam yachts and schooner-rigged yachts. At bowstaff by launches, gigs and dingys.

| Size, Inches | Each, Wool | Size, Inches | Each, Wool |
|-----------------|---------------|-----------------|---------------|
| 12x18 | ... | 24x36 | ... |
| 16x24 | ... | 32x48 | ... |
| 20x30 | ... | 40x60 | ... |

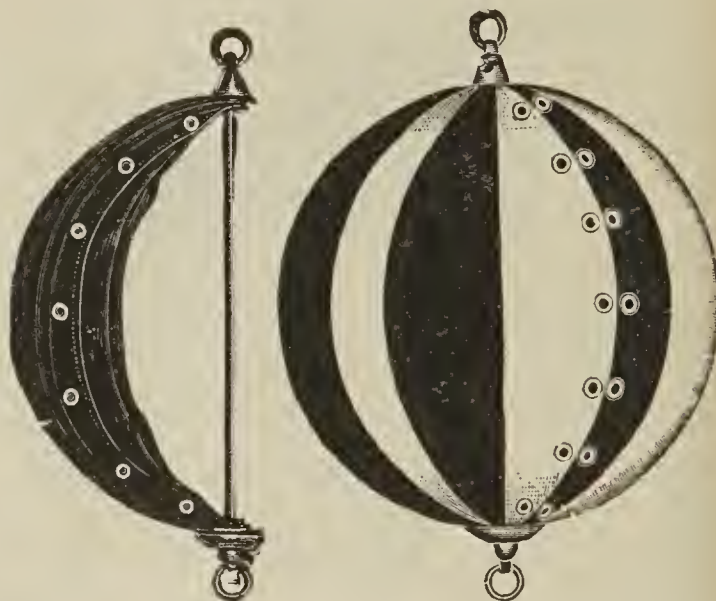
Prices On Application

HOOP FLYS



Give wind direction. Blue cloth cone. Made all lengths.
Hoop Flys Per Foot \$0.60

DAY SIGNALS



Closed No. 4, Black and White Ball;

For self-propelling suction dredges under way with their suction in the bottom, require during the day two No. 5 black balls, and during the night, in addition to regulation lights, two red mast head lights and two special four point red lights.

For vessels which are moored or engaged in laying pipe or submarine construction during the day, one No. 4 black and white ball and one No. 3 red ball; during the night three red towing lights. Made of heavy, 8-ounce duck; brass trimmings.

| Nos. | Description | Diameter Inches | Each |
|------|-----------------|--------------------|--------|
| 3 | Red | 24 | \$9.00 |
| 4 | Black and White | 24 | 10.50 |
| 5 | Black | 24 | 6.00 |

NIGHT PENNANTS AND FLYS



Sewed and finished throughout in first class manner. Made of best grade wool bunting.

In 1 to 12 Foot Lengths Per Foot \$0.35

YACHT FLYS



ALL WOOL

Made of best grade bunting, sewed and finished throughout in a first class manner. Have strong canvas headings.

| Each | | | | Each | | | |
|------|------------|-----------|------------|------|------------|-----------|------------|
| Nos. | Size, Feet | One Color | Two Colors | Nos. | Size, Feet | One Color | Two Colors |
| 5441 | 1¼ | \$0.25 | \$0.40 | 5445 | 3 | \$0.65 | \$1.10 |
| 5442 | 1½ | .35 | .60 | 5446 | 3½ | .80 | 1.25 |
| 5443 | 2 | .40 | .70 | 5447 | 4 | 1.00 | 1.60 |
| 5444 | 2½ | .45 | .80 | .... | .... | .... | .... |

MOTOR BOAT REQUIREMENTS

Numbers on Bow—Three inches in height is the minimum—must be distinct—clearly visible and readable at a distance of at least 100 feet. This applies to all motor boats, whether or not machinery is in working order.

Equipment—Must be on board when underway.

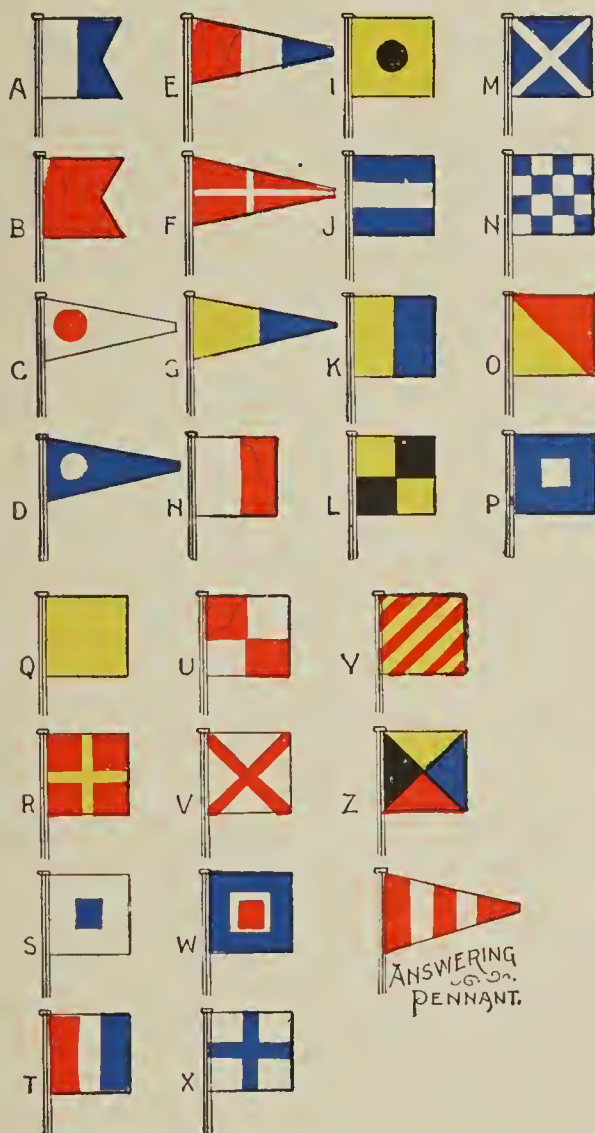
Life Preservers—Must be of a type approved by the U. S. Local Inspectors, and be in good condition.

Fire Extinguisher—Must be of a type approved by the U. S. Local Inspectors (see Department Circular No. 236).

Lights—Must be lit immediately after sundown.

Award of Number Sheet—Should be on board at all times when underway.

INTERNATIONAL CODE OF SIGNALS

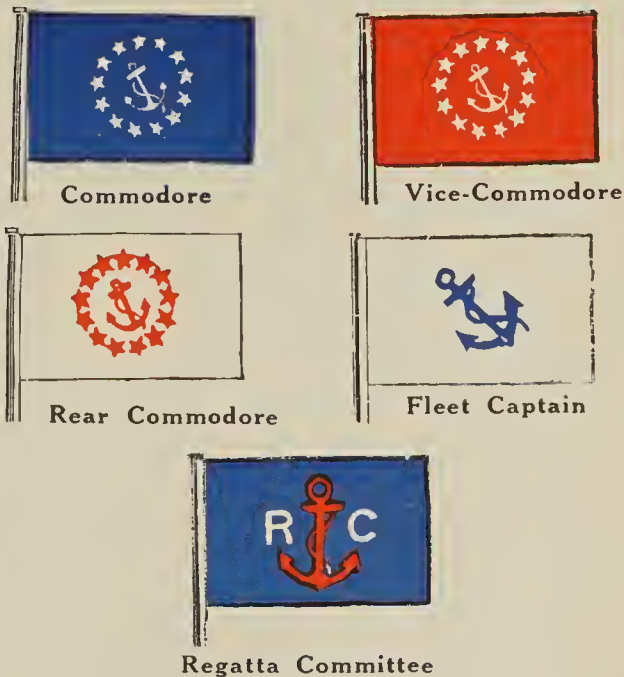


Consists of 27 flags made of best grade wool or mixed bunting. Seams double stitched, and flags finished throughout in a first class manner; with canvas headings; manila rope distance lines and ash toggles.

In dressing ship the International Code may be used to advantage. Care being taken to have burgees, pennants and rectangular flags bent on alternately. Hoist at the peak or staff aft the Yacht ensign, and on the Jack staff hoist the Jack.

| Nos. | Description | Size, Feet | Each | |
|------|----------------------|---------------|---------|---------|
| | | | Wool | Mixed |
| 0 | 19 Rectangular Flags | 1 x 1 1/4 | | |
| | 6 Pennants | 3/4 x 1 3/4 | \$34.20 | \$26.40 |
| | 2 Burgees | 1 x 1 1/4 | | |
| 1 | 19 Rectangular Flags | 1 1/4 x 1 1/2 | | |
| | 6 Pennants | 1 x 2 | 38.75 | 29.35 |
| | 2 Burgees | 1 1/4 x 1 1/2 | | |
| 2 | 19 Rectangular Flags | 1 1/2 x 2 | | |
| | 6 Pennants | 1 x 3 | 43.35 | 31.55 |
| | 2 Burgees | 1 1/2 x 2 | | |
| 3 | 19 Square Flags | 2 x 2 | | |
| | 6 Pennants | 1 x 3 1/2 | 49.15 | 35.20 |
| | 2 Burgees | 2 x 2 | | |
| 4 | 19 Rectangular Flags | 2 x 2 1/4 | | |
| | 6 Pennants | 1 1/2 x 3 1/2 | 52.70 | 36.70 |
| | 2 Burgees | 2 x 2 1/4 | | |
| 5 | 19 Rectangular Flags | 2 1/4 x 2 1/2 | | |
| | 6 Pennants | 1 1/2 x 4 | 60.00 | 40.35 |
| | 2 Burgees | 2 1/4 x 2 1/2 | | |
| 6 | 19 Rectangular Flags | 2 x 3 | | |
| | 6 Pennants | 1 1/2 x 5 | 66.70 | 44.00 |
| | 2 Burgees | 2 x 3 | | |

OFFICERS PENNANTS

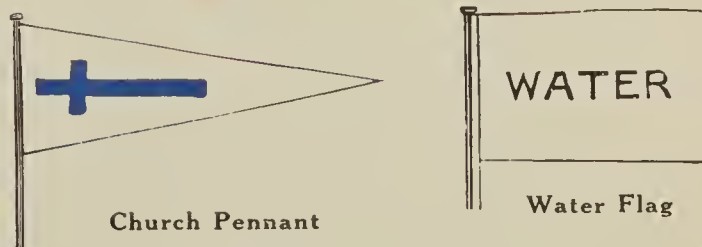
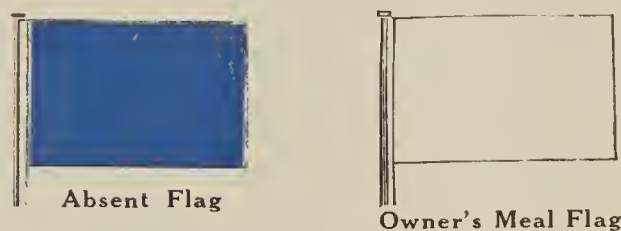


U. S. STANDARD BUNTING

Made of best grade wool bunting; sewed and finished throughout in first class manner; stars are sewed from both sides.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 12x18 | \$2.15 | 24x36 | \$3.40 |
| 16x24 | 2.55 | 32x48 | 5.00 |
| 20x30 | 2.85 | 40x60 | 6.00 |

SIGNALS FLAGS



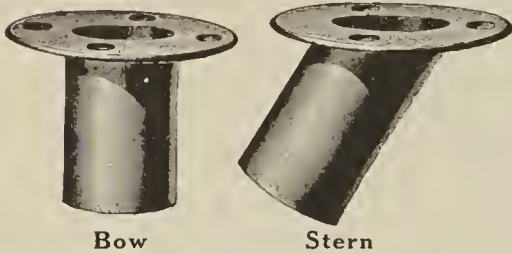
U. S. STANDARD BUNTING

Sewed and finished throughout in first class manner; made of best grade wool bunting.

| Absent, Owner's and Crew Meal Flags | | Church and Water Flags | |
|-------------------------------------|--------|------------------------|--------|
| Size, Inches | Each | Size, Inches | Each |
| 12x18 | \$.... | 12x18 | \$.... |
| 16x24 | | 16x24 | .... |
| 20x30 | | 20x30 | .... |
| 24x36 | | 24x36 | .... |
| 32x48 | | 32x48 | .... |

Prices on Application

FLAG POLE SOCKETS

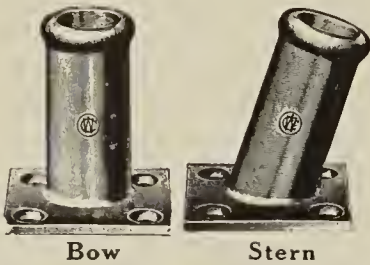


FLUSH
Galvanized
Cast iron; hot galvanized finish; for use on all types of boats; have drain hole.

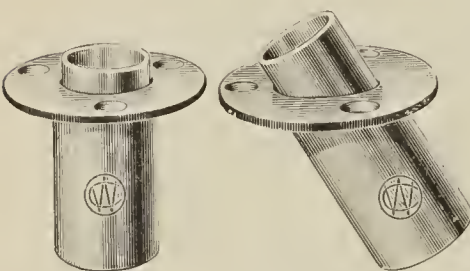
| Inside Diam., Inches | Weight Each, Lbs. | Bow, Each | Stern Each |
|----------------------|-------------------|-----------|------------|
| 3/4 | 3/8 | \$0.25 | \$0.25 |
| 1 | 1 13/16 | .30 | .30 |
| 1 1/4 | 1 13/16 | .35 | .35 |
| 1 1/2 | 1 3/8 | .60 | .60 |

UPRIGHT
SQUARE BASE
Galvanized

Malleable iron; hot galvanized; for use on all types of boats.



| Inside Diam., Inches | Size Base, Inches | Height, Inches | Weight Each, Lbs. | Bow, Each | Stern, Each |
|----------------------|-------------------|----------------|-------------------|-----------|-------------|
| 3/4 | 2 | 2 1/2 | 3/8 | \$0.30 | \$0.30 |
| 1 | 2 1/2 | 4 1/4 | 1 13/16 | .40 | .40 |
| 1 1/4 | 2 3/4 | 5 | 1 13/16 | .65 | .65 |
| 1 1/2 | 3 1/4 | 5 3/4 | 1 3/8 | .90 | .90 |

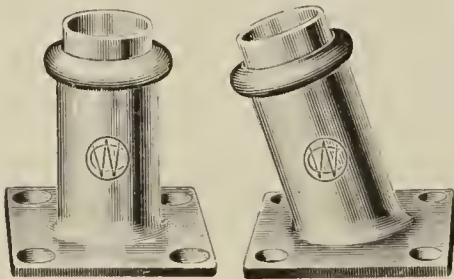


FLUSH TYPE
With Sleeve
Brass
Polished cast brass; with drain hole. Furnished with separate brass sleeve to be put on flag staff. Eliminates sticking of watersoak flag staff in sockets.

| Inside Diam., Ins. | Dia. Flame, Ins. | Weight Each, Ounces | No. 556 Bow, Each | No. 557 Stern, Each |
|--------------------|------------------|---------------------|-------------------|---------------------|
| 3/4 | 2 | 4 | \$0.75 | \$0.75 |
| 1 | 2 1/4 | 7 | .90 | .90 |
| 1 1/4 | 2 1/2 | 10 | 1.25 | 1.25 |
| 1 1/2 | 3 1/8 | 16 | 1.75 | 1.75 |
| 1 3/4 | 3 3/8 | 20 | 2.25 | 2.25 |
| 2 | 3 7/8 | 30 | 3.00 | 3.00 |

UPRIGHT
Square Base
Brass

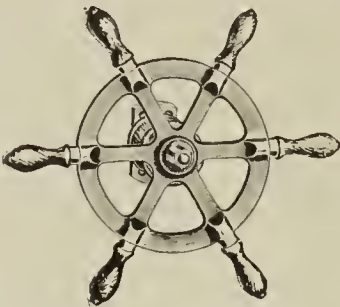
With separate brass sleeve for attachment to flag staff. Eliminates sticking of watersoak flag staff in socket. Polished cast brass.



| Inside Diam., Ins. | Size of Base, Ins. | Height, Inches | Weight Each, Ozs. | No. 549 Bow, Each | No. 550 Stern, Each |
|--------------------|--------------------|----------------|-------------------|-------------------|---------------------|
| 3/4 | 2 x2 | 1 3/4 | 4 | \$1.00 | \$1.00 |
| 1 | 2 1/4 x2 1/4 | 2 1/4 | 6 | 1.35 | 1.35 |
| 1 1/4 | 2 3/4 x2 3/4 | 2 3/4 | 10 | 1.75 | 1.75 |
| 1 1/2 | 3 x3 | 3 1/2 | 18 | 2.25 | 2.25 |
| 1 3/4 | 3 1/4 x3 1/4 | 4 5/8 | 22 | 2.75 | 2.75 |
| 2 | 3 1/2 x3 1/2 | 5 | 30 | 3.50 | 3.50 |

LAUNCH STEERING WHEELS

BRASS
Style 6455



For small cabin cruisers and other light craft; fastens to side of cabin or to the bulkhead.
Wheel is of polished, cast brass, with hardwood grips; brass axle, bearings and plate with holes for countersunk screws; solid wood drum.

| Diameter Wheel, Inches | Diameter Drum, Inches | Length Drum, Inches | Each |
|------------------------|-----------------------|---------------------|--------|
| 12 | 2 1/2 | 3 | \$6.50 |
| 16 | 3 | 3 1/2 | 8.50 |
| 20 | 4 | 4 1/2 | 17.00 |
| 25 | 4 | 6 | 35.00 |

GALVANIZED
Style 6457

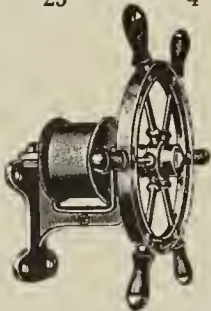
Wheel is of galvanized iron, with hardwood grips; galvanized iron axle, bearings and plate with holes for countersunk screws; solid wood drum.



| Diameter Wheel, Inches | Diameter Drum, Inches | Length Drum, Inches | Weight Each, Lbs. | Each |
|------------------------|-----------------------|---------------------|-------------------|--------|
| 12 | 2 1/2 | 3 | 3 1/8 | \$3.00 |
| 16 | 3 | 3 1/2 | 5 3/4 | 4.40 |
| 20 | 4 | 4 1/2 | 13 | 8.75 |
| 25 | 4 | 6 | 20 1/2 | 16.00 |

BRACKET STEERERS

GALVANIZED IRON



Used on light craft for bolting to the cabin or bulkhead.
Made with a heavy cast iron bracket, galvanized; wooden drum; galvanized iron wheel with hardwood grips.

| Nos | Diameter Wheel, Inches | Diameter Drum, Inches | Length Drum, Inches | Weight Each, Lbs. | Each |
|-----|------------------------|-----------------------|---------------------|-------------------|---------|
| 1 | 20 | 4 | 4 | 19 3/4 | \$22.50 |
| 2 | 22 | 4 | 4 | 20 | 28.00 |
| 3 | 25 | 4 1/2 | 4 1/2 | 28 1/2 | 38.00 |
| 4 | 28 | 6 | 6 | 46 1/2 | 43.00 |
| 5 | 30 | 6 | 6 | 55 | 47.00 |

Note—Can be furnished with drums of any dimensions upon special order.

BRASS SPROCKET STEERERS

COAST GUARD TYPE
—POLISHED BRASS

This Steerer is of exceptionally strong design and very attractive in appearance. It is fitted with a heavy brass steering wheel which has a heavy bronze hub into which the spokes are screwed. The handles are pinned to the rim to prevent their turning.



| Size, Nos. | Diameter Wheel, Inches | Pitch of Chain, Inches | Length of Chain, Feet | Price, Each |
|------------|------------------------|------------------------|-----------------------|-------------|
| 1 | 18 | 5/8 | 3 | \$27.00 |
| 2 | 20 | 5/8 | 3 | 30.00 |
| 3 | 24 | 5/8 | 3 | 36.00 |
| 4 | 28 | 3/4 | 3 1/2 | 50.00 |
| 5 | 30 | 3/4 | 3 1/2 | 55.00 |
| 6 | 36 | 3/4 | 3 1/2 | 65.00 |

CRUISER STEERERS

BULKHEAD TYPE—WORM
GEARED
No. 5717



An improved form of ropeless steerer for cruisers up to 38 feet in length and powered with not over 150 horse-power. Requires but a minimum amount of space. Moderately priced, saves installation costs; no pulleys, steering blocks or steering cable; quadruple worm type arrangement insures easy and smooth steering under all conditions and due to the reverse action on a worm gear, this steerer is practically "self locking," a most desirable feature in a one man control boat. Made of bronze throughout. As illustrated, this steerer is installed on the outside of bulkhead. On such installations, boat builders generally construct a wood cabinet to cover everything but the wheel, utilizing the top of the cabinet to mount the compass binnacle—a neat and most practical arrangement. Vertical shaft is $1\frac{1}{8}$ inches in diameter, any length up to $4\frac{1}{2}$ feet long. Shaft

for wheel is $1\frac{1}{8}$ inches in diameter; lower lever is 9 inches; center to center of hole. One additional lever is provided as is shown on lower end of shaft for use as tiller arm for rudder post.

With 20 Inch Polished Brass Wheel.....\$65.00
With 25 Inch Polished Brass Wheel..... 70.00
With 20 Inch Mahogany Wheel..... 75.00
With 24 Inch Mahogany Wheel..... 80.00
Without Wheel but machined for Wood Wheel..... 55.00

Note—Additional lengths of vertical shaft can be furnished for \$2.50 per foot or fraction thereof.

Steerer can be reversed for installation on inside of bulkhead if desired. Price upon application.

RACK & PINION GEAR STEERERS

Made of Bronze Throughout

This powerful geared steerer with cut teeth gears and rack is suitable for almost any size boat up to 60 feet. Steers direct without any lost motion. The illustration speaks for itself. It was designed to meet the requirements of particular naval architects who want the best that can be made regardless of cost.

Length of shaft regularly furnished, 40 inches.

Dimensions of rack to your specifications.

Distance from bulkhead to center of vertical shaft, $2\frac{3}{4}$ inches.

Distance from steering wheel to bulkhead bracket, 9 inches.



With 20 Inch Mahogany Wheel..... Each \$85.00
With 24 Inch Mahogany Wheel 90.00
With 28 Inch Mahogany Wheel..... 110.00

Can be furnished with all brass wheel at \$10.00 less than above.

BULKHEAD STEERERS

No. 5713—CHAIN AND SPROCKET
TYPE

With Brass Wheels



Made with $4\frac{3}{8}$ inch sprocket for boats up to 40 feet and with $5\frac{5}{8}$ -inch sprocket for larger boats. Wheel placed on the bulkhead. The key and shaft are long enough to allow for any ordinary thickness of bulkhead. When in place, gear is behind bulkhead.

Made entirely of brass; brass wheels are polished and have hardwood grips. Furnished complete with a three-foot length of brass sprocket chain with shackles for attaching to tiller rope. With polished brass outside flange.

| Size Wheel, Inches | End of Shaft, Size, Inches | Size Sprocket, Inches | With Brass Wheel, Each | *Without Wheel, Each |
|--------------------|-------------------------------------|-----------------------|------------------------|----------------------|
| 16 | ..... | ..... | \$20.00 | \$15.00 |
| 20 | $1\frac{1}{8} \times 2$ | $4\frac{3}{8}$ | 26.00 | 19.00 |
| 25 | ..... | ..... | 34.00 | ..... |
| 24 | 1×2 | $4\frac{3}{8}$ | ..... | 21.00 |
| 28 | $1\frac{1}{8} \times 2\frac{5}{16}$ | $4\frac{3}{8}$ | ..... | 25.00 |
| 30 | $1\frac{1}{8} \times 2\frac{5}{16}$ | $5\frac{5}{8}$ | ..... | 25.00 |
| 36 | $1\frac{1}{4} \times 2\frac{1}{2}$ | $5\frac{5}{8}$ | ..... | 25.00 |

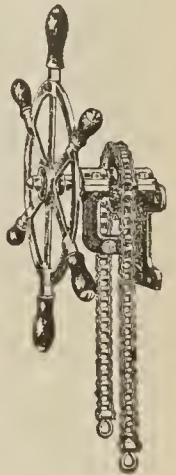
*Without Wheel—But Machined for Wood Wheel.

BRACKET STEERERS

No. 5714—CHAIN AND SPROCKET
TYPE

Made with a plain brass bracket; wheels have hardwood grips, polished wheel.

Furnished complete with a three-foot length of $\frac{5}{8}$ -inch pitch brass sprocket chain with shackles for attaching the tiller rope. With 1 or $1\frac{1}{8}$ inch shafts.



| Size Wheel, Inches | Sprocket, Inches | Weight Each, Lbs. | Each |
|--------------------|------------------|-------------------|---------|
| 16 | ..... | .. | \$20.00 |
| 20 | $4\frac{3}{8}$ | 15 | 26.00 |
| 25 | $4\frac{3}{8}$ | 21 | 34.00 |

Extra length sprocket chain, 36 inch... 6.85

ROPELESS STEERING GEARS

SPOKE WHEEL
BULKHEAD TYPE
FOR CRUISERS TO
60 FEET

The design and construction of the gear allows for a smooth, noiseless and positive action.

Fitted with finely finished, fancy mahogany spoke steering wheel, without controls and horn button. Sliding collar on wheel shaft adapts it to varied thicknesses of bulkheads.

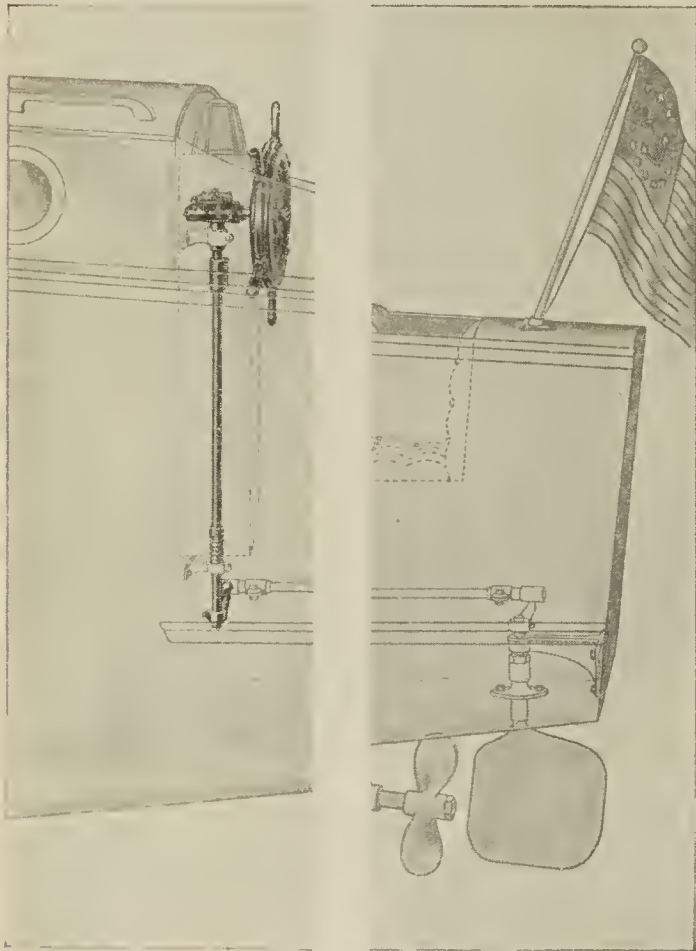
The most powerful boat can be steered with practically no

effort and the rudder is held in position at all times until changed by revolving wheel. Auxiliary tiller can be used by unscrewing cover and lifting worm out of position.

Installation is simple and inexpensive on account of adjustable bulkhead brackets on steering column and universal joints used in coupling up. Quadrant section is $9\frac{1}{2}$ inches high and requires a space of $19\frac{1}{2} \times 15$ inches.

| Nos. | Diameter of Wheel, Inches | Bulkhead to Wheel, Inches | Diameter Column, Inches | Weight Each, Lbs. | Each |
|------|---------------------------|---------------------------|-------------------------|-------------------|----------|
| 9010 | 20 | 6 | $1\frac{1}{4}$ | 95 | \$ 95.00 |
| 9011 | 24 | 6 | $1\frac{1}{4}$ | 97 | 100.00 |
| 9012 | 30 | 6 | $1\frac{1}{4}$ | 100 | 110.00 |

ROSS CRUISER STEERERS



No. 140552

For Cruisers Up to 35 Feet in Length

This steerer is made for use with a Ship's Wheel.

The Wheel is not included. For different sizes and types of wheels suitable for this steerer, see Page 111.

This steerer is complete with two ball socket joints, upper mounting bracket, lower mounting bracket, and Tiller Arm. These are illustrated below.

Each

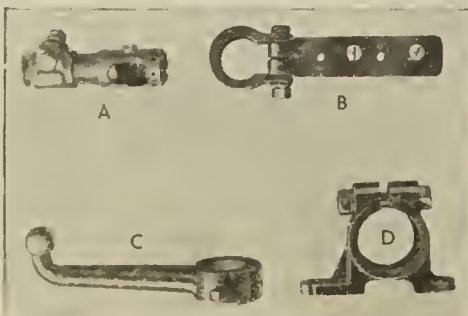
No. 140552—Net Weight, approximately 22 Lbs.
Shipping Weight approximately 28 Lbs. \$39.00

For Cruisers 35 Ft. to 45 Ft. in Length

No. 260553—Same as above but of heavier construction. Is complete with two ball socket joints, upper mounting bracket, lower mounting bracket, and tiller arm as illustrated below.

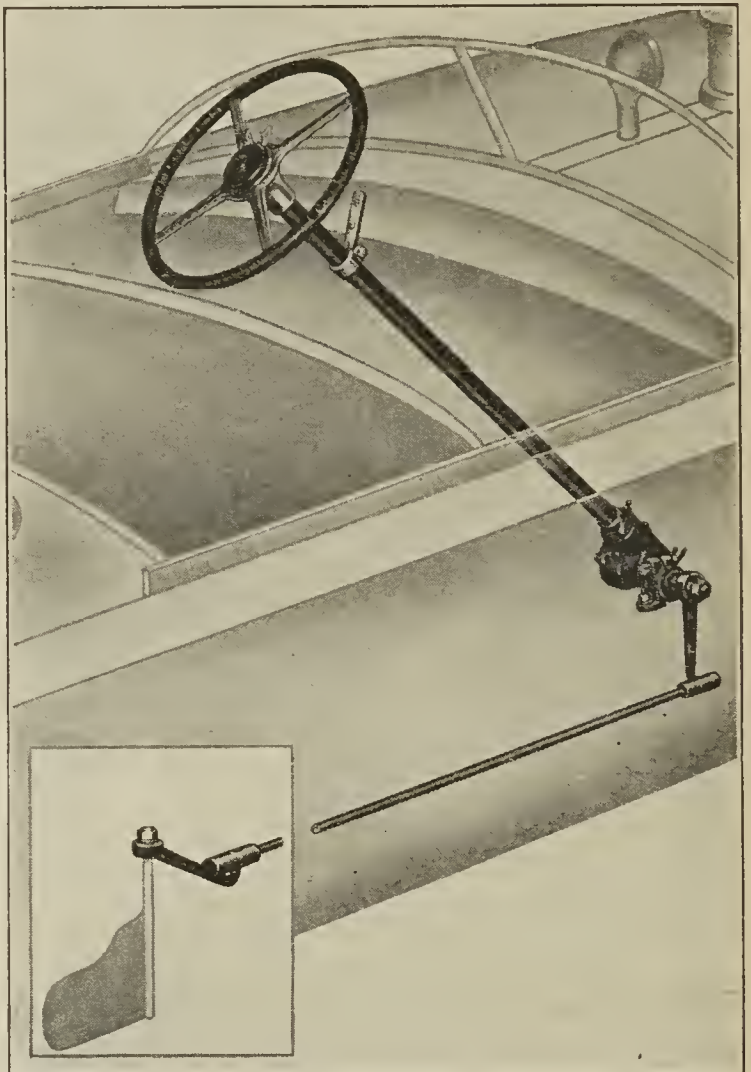
Net Weight, approximately, 32 Lbs. Shipping Each
Weight, approximately, 42 Lbs. \$44.00

Standard stock steerer has a horizontal wheel shaft 8½ inches; machined to take wheel with hub 2 inches thick, ⅞-inch bore, ¼-inch Keyway. The vertical shaft is 60 inches long with 24-inch long Keyway, which may be cut down to suit your own requirements. Special lengths to order.



A. Ball Socket Joint. B. Upper Mounting Bracket.
C. Tiller Arm. D. Lower Mounting Bracket

ROSS CAM AND LEVER STEERERS



No. 180

This size steerer is suitable for any Cruiser or large runabout requiring drag link type steering control.

Makes excellent appearance and is most positive type steering control procurable. Nothing to care for after installation is made. Easily installed by addition of correct length of pipe only. All socket joints mounted on 1 inch balls turned on end of steering arm and tiller arm insures positive alignment and noiseless steering.

Tiller arm has 1 inch diameter hole bored for rudder, stock-ball sockets are threaded for ½ inch pipe. With this steerer is included an 18 inch heavy hard rubber composition steering wheel. The following column lengths are standard.

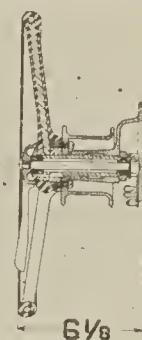
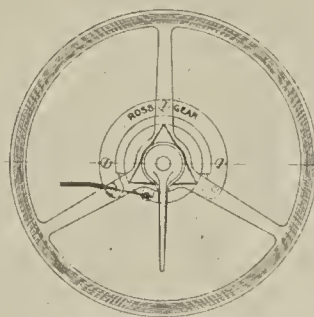
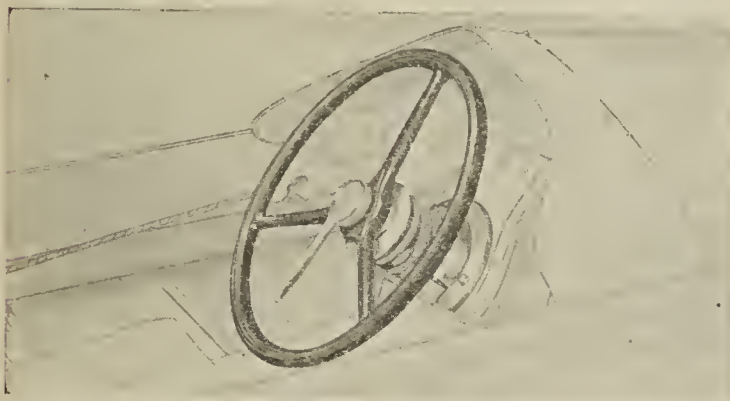
Inches
37-40-45-60

No. 180—Complete Including Dash Brackets, Lower Mounting Bracket, Tiller Arm and Two Ball Each
Socket Joints; Connecting Pipe Only to be Added. \$40.00

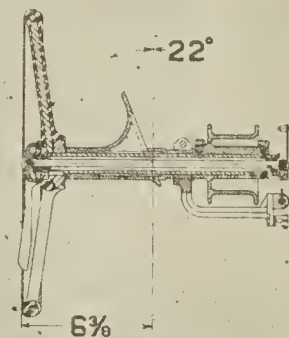
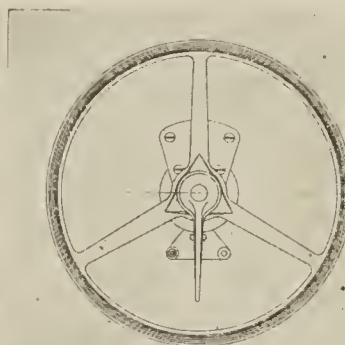
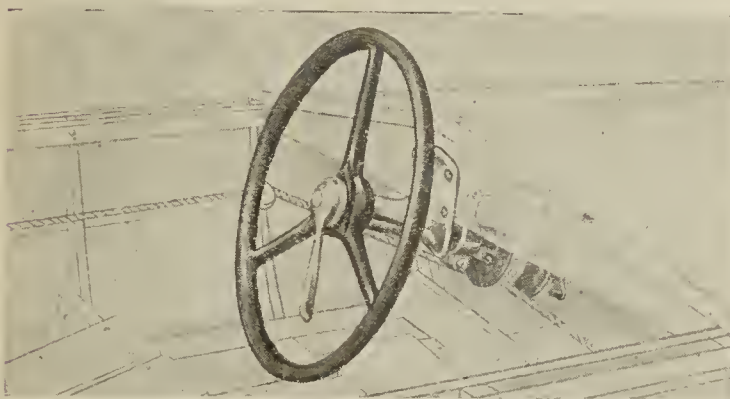
No. 140—Same Type of Steerers as Above, But Slightly Smaller and Lighter. Has a 17-Inch Wheel, Recommended for Use on Smaller Type Runabouts. Complete Including Dash Brackets, Lower Mount- Each
ing Bracket, Tiller Arm and Two Ball Socket Joints \$35.00

Please specify model, length of column when ordering.

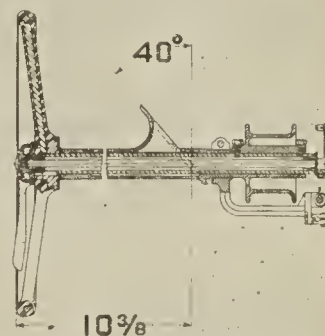
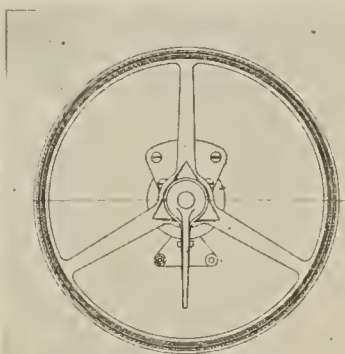
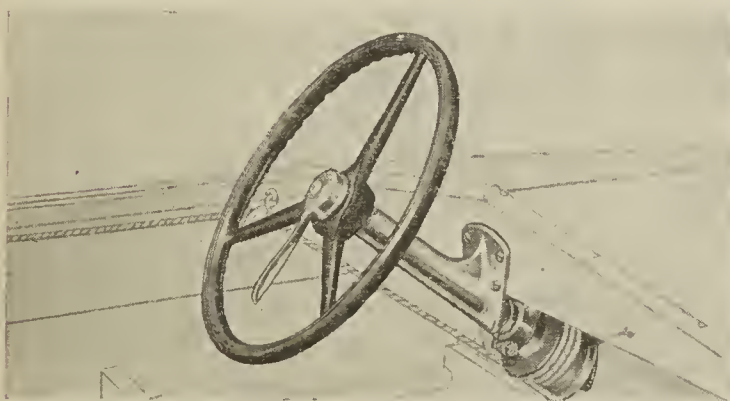
ROSS MARINE STEERERS ENGINEERED AND BUILT TO AUTOMOTIVE STANDARDS

**MODEL 161 RACING STEERER**

Wheel Diameter, 15 Inches.....
Base Diameter, 6 1/4 Inches Overall Each \$13.00

**MODEL 162 RUNABOUT STEERER**

Wheel Diameter, 15 Inches.....
Drum Diameter, 2 7/8 Inches..... Each \$16.00

**MODEL 162 SPECIAL RUNABOUT STEERER**

Wheel Diameter, 15 Inches.....
Drum Diameter, 2 7/8 Inches Each \$17.00

Swivel Clamp for Bowden Wire, Right or Left Side.

ROSS MARINE STEERERS bring to boat steering the same distinction of appearance, perfect operation and long life that are characteristic of the famous Ross cam and lever steering gear for automobiles. The steerers are designed to set a new standard in appearance and sturdiness.

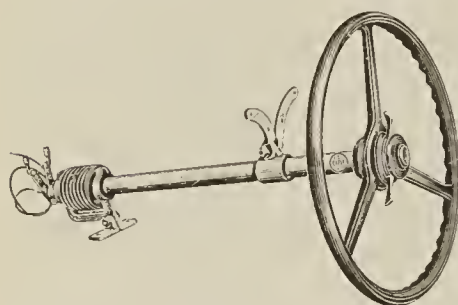
The 15-inch steering wheels are of reinforced steel, completely covered with a rubber composition resistant to all weather conditions. All aluminum castings in Ross steerers are made of a special aluminum alloy, selected for its resistance to conditions encountered in motor boating. Careful machining and finishing produces unusual smartness of appearance, all parts in view being highly polished on all types.

In the runabout type steerers the wheel and drum shafts are made of steel, heavily cadmium-plated to insure weather-resistance. Both runabout and racing boat types are equipped with oil-holes for lubrication.

The throttle lever tube is mounted in rubber-cushioned bushings, preventing any lost motion and rattle. A spring terminal is provided at the extreme of throttle lever movement, by which the magneto is grounded, thus stopping the motor. A ten-foot length of Bowden wire is provided with each No. 161 steerer for connecting the throttle lever control with the carburetor, and a fifteen-foot length of Bowden wire is provided with other models.

AUTO BOAT STEERERS

FOR RUNABOUTS AND SPEED BOATS
MODEL M—WITH DRUM—SINGLE TUBE



Polished brass tubing forms the column and is fastened to the wheel and drum, and turns with the wheel used on the smaller types of runabouts and auto-boats.

Equipped with controls for both

the spark and throttle, with hand levers placed inside the wheel; all metal parts are of brass, with exposed surfaces highly polished. Equipped with a 17" 3-spoke hard rubber wheel, brass spider, highly polished.

Column is 1 1/4 inches in diameter and 24 inches in length, measured from bracket plate to top of wheel. Has a 3-inch aluminum alloy grooved drum.

| Type Drum | Diameter Drum, Inches | Weight Each, Lbs. | Each |
|------------------|-----------------------|-------------------|---------|
| Grooved Aluminum | 3 | 17 | \$25.00 |

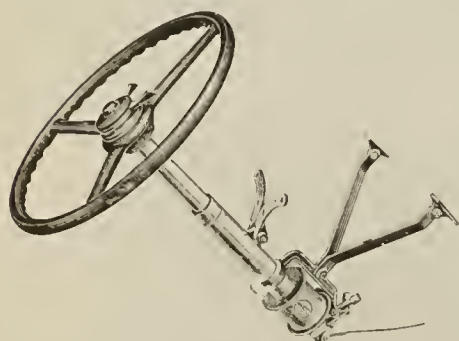
MODEL O—WITH DRUM SINGLE TUBE

Polished brass tubing forms the column and is fastened to the wheel and drum, and turns with the wheel. Used principally with smaller types of runabouts and auto-boats.

Equipped with controls for both the spark and throttle, with the hand levers placed inside the wheel; all metal parts are of brass, with exposed surfaces highly polished. Equipped with a fourteen-inch laminated hardwood wheel with three-spoke brass spider, highly polished; wheel has a mahogany finish.

Column is 1 inch in diameter and can be furnished in any length up to 16 inches, as ordered; determine length by measuring from bracket plate to top of wheel. Has an all-wood drum or a hollow grooved aluminum drum, as ordered.

| Type of Drum | Diameter Drum Inches | Weight Each, Lbs. | Each |
|------------------|----------------------|-------------------|---------|
| Wood | 2 3/4 | 11 | \$25.00 |
| Grooved Aluminum | 2 3/4 | 11 | 27.00 |



JUNIOR P

Combines low cost installation with moderate price. Bulkhead bracket is so worked out that little fitting is required. Just slipped under the dash and bolted on. Made of polished brass except the 3-inch diameter, scored aluminum alloy drum. Wheel is

14 inches in diameter and has a black, reinforced, indestructible composition rim. Length from dash to top of wheel, 12 inches. Bracket is 6 inches long and 3 inches wide with three bolt holes for fastening. Large and convenient spark and throttle levers.

No. 907—Weight Each, 11 Lbs.\$18.00

OUTBOARD STEERERS

MASON

Particularly designed for race boat use. The hard rubber wheel is secured to the two bearing steerer column by four heavy bolts going through the top and bottom wheel plates.

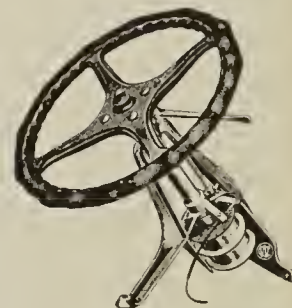
There is no danger of wheel loosening or steerer column whipping. Scored drum used is adjustable as to height and prevents jamming of steering cable. The tripod frame base provides for six bolt fastenings and cannot pull out. Only Government specification aluminum alloy is used, assuring the strongest steerer possible. Made with or without remote control. Diameter of wheel, 17 inches; diameter of base, 8 1/2 inches; height over all, 10 1/4 inches; dimensions of scored drum, 3 1/2 x 3 inches. Weight each, 6 3/4 pounds.

No. 905—Without Remote Control.....\$10.00
No. 906—With Remote Control and 7 Ft. Bowder Wire and Casing 11.50

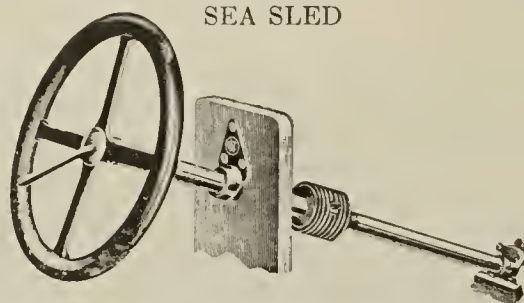
PENN-YAN

Dependable lightweight racing gear; bracket provides for two fastenings to cross members of frame and one to keel. Driver can swing his entire weight on this steerer without it giving away. Throttle control is independent of steering column, cannot stick or turn with wheel. Has cut-out button in center of wheel and sufficient waterproof wire to handle any installation. Made throughout of salt water resisting, special aluminum alloy except wheel and spider which is made of hard rubber. Diameter wheel, 17 inches; height from keel to wheel center, 15 inches. Bolt spacing, on front bracket, 8 inches; between front and rear brackets, 12 inches with 7 ft. Bowden cable.

No. 8866—Weight Each, 7 Lbs\$14.00



SEA SLED



For runabout types; two point suspension; can be so rigidly installed that nothing can give way even though the driver throws his full weight on the wheel under rough running conditions. Has carburetor control lever on wheel which works on ratchet built into lower bracket so that turning of wheel cannot unintentionally alter position of control lever. Wheel rim is of black, indestructible composition with four spokes, polished, cast nickel silver spider. Dash bracket and bearing polished nickel; lower bracket, scored drum, and ratchet, brass. Diameter wheel, 14 inches; column, 1 1/4 x 36 inches; dash bracket, 5x3 inches; lower bracket, 2 1/2 x 4 1/4 inches; drum, 3x3 inches. Motor shut-off short circuiting terminal is built into specially designed lower bracket.

No. 8868—Weight Each, 10 1/2 Lbs.—on application

Proper hardware and equipment means the difference between good and poor boats. On race boats the slightest handicap is multiplied so that it is necessary for owners to get the best equipment possible. This catalog represents our efforts to list the market's best outboard and inboard-outboard equipment.

WOOD STEERING WHEELS

WHEEL AND STAND



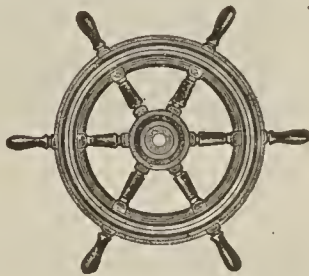
For tugs and steamboats; with drum, frame, brass shaft and roller bushings; made entirely of mahogany or with mahogany rim, locust spokes and ash frame; plugged or inlaid as ordered; has three coats of spar varnish. Absolute matching of the woods used and the perfect fitting of all parts.

| Diameter, Inches | Weight Each, Lbs. | Plugged | Inlaid |
|---------------------|-------------------------|---------|---------|
| | | Each | Each |
| 24 | 40 | \$67.38 | \$71.23 |
| 30 | 45 | 68.75 | 74.25 |
| 36 | 65 | 86.63 | 90.48 |
| 42 | 70 | 90.48 | 100.10 |
| 48 | 80 | 98.18 | 107.80 |
| 54 | 85 | 103.95 | 124.58 |
| 60 | 95 | 117.43 | 128.98 |
| 66 | 105 | 127.05 | 138.60 |
| 72 | 125 | 132.83 | 144.38 |

WHEELS ONLY



Plugged



Holly Inlaid

Made entirely of mahogany or mahogany rim with locust spokes; furnished with inlay of white holly ribbons; regularly finished with three coats of spar varnish. Absolute matching of all woods used and the perfect fitting of all the parts.

| Diameter | Weight, Each | Plugged | Holly Inlaid |
|----------|-----------------|---------|-----------------|
| | | | |
| 20 | 6 | \$27.50 | \$29.40 |
| 24 | 8 | 30.25 | 31.20 |
| 28 | 11 | 34.87 | 40.00 |
| 30 | 12 | 38.50 | 42.00 |
| 36 | 28 | 66.00 | 66.60 |

Brass Cheek and Larger Sizes on Application



GALVANIZED IRON

For use with all sizes of boat steerers.

These wheels are neat appearing and strong; wheel is made from a high grade iron casting, spokes are of steel; wood handles with brass tips.

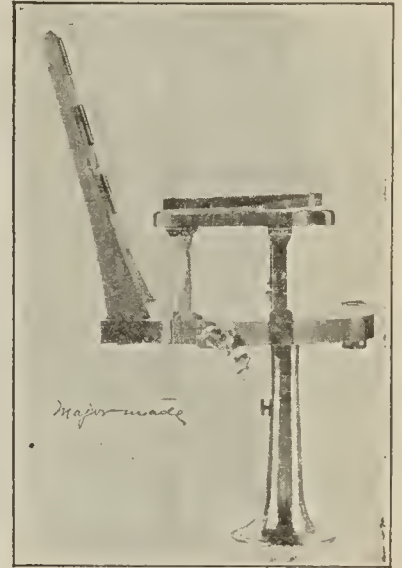
Wheels are measured between extreme end of handles.

| Diameter Wheel, Inches | Number of Spokes | Size Hub, Hole, Inches | Length Hub, Inch | Weight Each, Lbs. | Each |
|------------------------------|---------------------|---------------------------|---------------------|----------------------|---------|
| 20 | 6 | 1 5/16 | 2 9/16 | 9 | \$12.50 |
| 22 | 6 | 1 5/16 | 2 11/16 | 13 | 15.50 |
| 25 | 6 | 1 | 2 7/8 | 16 | 18.00 |
| 28 | 6 | 1 1/8 | 2 15/16 | 21 | 21.00 |
| 30 | 8 | 1 1/4 | 3 3/16 | 31 | 24.00 |
| 36 | 8 | 1 3/8 | 3 1/16 | 41 | 33.00 |

FISHING CHAIRS

MODEL A

Designed for big game salt water fishing. Not an office chair adaption, being especially constructed for fishing. No expense has been spared in design, workmanship or material to produce a sturdy, serviceable chair that will withstand the hardest kind of fishing. Finished in natural wood. The universal swivel rod, socket, universal rod holder and removable back make this chair indispensable to big game fishermen. An adjustment of the rod



socket can be made to fit either straight or tapered rod. The only chair capable of this adjustment. The rod holder on the side of the chair securely holds the rod while the fisherman rests or leaves the chair. Line need not be reeled in. While trolling, the rod may be instantly released when a fish strikes or the line is fouled. Wooden parts consist of chair seat, back and arm rests which are of mahogany and hickory, being well filled and varnished. Bronze parts consist of chair base, deck flange, chair flange; highly polished or painted. The chair can be unscrewed from the deck plate, leaving deck flush, when not in use.

Each
Model A—Weight, 70 Lbs.\$140.00

MODEL B

Same as Model A except it has straight type rod socket of bronze. Other metal parts of Heavy Galvanized castings. Wood work of hickory and white wood painted Marine Brown.

Each
Model B—Weight, 63 Lbs.\$80.00

FOLDING CHAIRS

GOLD MEDAL



Made of thoroughly tested, seasoned hardwood; varnished finish; cover is of good quality fancy ticking or duck, put on double in an end-

less piece and left movable on the frame; this feature adds greatly to the life of the chair as there are two thicknesses of canvas, and being movable on the frame, the wear is evenly distributed and does not come all in one place. It is adjustable to three positions and folds flat.

No. S11F—With Arm and Foot Rest; Weight Each, 14 1/2 Lbs.\$3.85

No. 35Y

Designed principally for use aboard boats. Frame is of selected hardwood, stained in a light mahogany finish; a good grade of spar varnish makes this chair as nearly waterproof as possible; the brass hardware assures protection against salt water and gives the chair a yachty appearance. The seat and back rest are of best grade khaki and will look well on deck or bridge. Folds compactly to a bundle 8x16 1/2x25 inches.

Each
No. 35Y—Weight Each, 14 Lbs.\$6.00

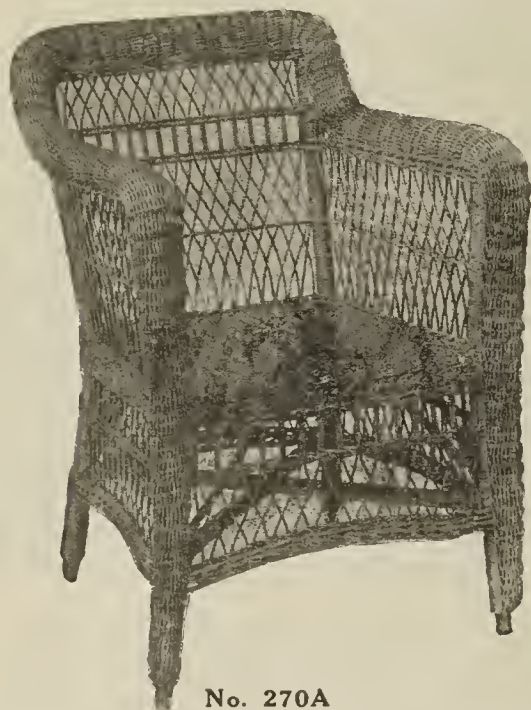
No. 35

Same as above with a natural wood, varnished finish and enameled hardware.

Each
No. 35—Weight Each, 14 Lbs.\$3.75



WICKER FURNITURE



No. 270A

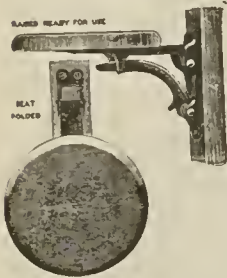
Hardwood frames, closely woven seats and arms, open weave sides and back; made of select willow reed; height from floor to seat, 15 inches; height from seat to top of back, 18 inches; extreme width of chair overall, 22 inches; finished in natural spar.

No. 270A

Each

\$18.00

STEERSMANS SEATS
HANDY



Rigid and substantial folding stool. A necessity on most cruisers for the man at the wheel and for extra passengers on runabouts and open boats. Fastens to bulkhead or siding. Folding bracket. Seat extends 14 inches; when folded flat, 4 inches. 11 inch hardwood seat, finished in mahogany. Metal parts aluminum painted.

No. 177—Wgt. Ea., 7 Lbs.....

Each

\$6.50

CHAIR TIPS

For use on chairs, crutches, table legs, etc., to prevent scratching of decks or floors or sliding on smooth surfaces; made from exceedingly tough and durable rubber, especially designed to resist hard wear; furnished in the most popular sizes.



| Nos. | Diameter Inside Inches | Per Dozen |
|------|---------------------------|--------------|
| 17 | $\frac{5}{8}$ | \$0.95 |
| 18 | $\frac{3}{4}$ | 1.10 |
| 19 | $\frac{7}{8}$ | 1.20 |
| 20 | 1 | 1.40 |
| 21 | $1\frac{1}{8}$ | 1.60 |

RUBBER BUMPERS
WITH SCREW



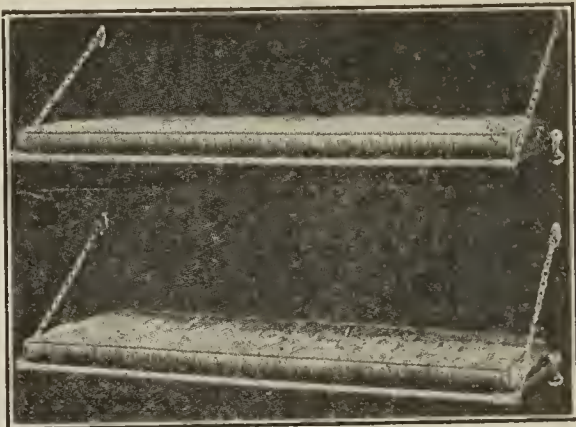
Made of selected rubber stock moulded to screws having a broad, concave washer on the head which absolutely prevents the rubber breaking off; will hold till the tip wears out. Slotted for screw driver.

| Nos. | Diameter Head, Inch | Per Gross | Nos. | Diameter Head, Inches | Per Gross |
|------|------------------------|-----------|------|--------------------------|-----------|
| 1 | $\frac{3}{4}$ | \$4.20 | 3 | 1 | \$6.00 |
| 2 | $\frac{7}{8}$ | 4.80 | 4 | $1\frac{1}{8}$ | 7.20 |

Seventy-two in a Box

PULLMAN BERTHS

No. 14



Upper Berth Raised to Make Double Bunks



Upper Berth Dropped to Form Back of Settee

Berth is attached directly to bulkhead and is easily installed. Constructed of steel bedstead tubing with Certified malleable iron castings. Standard size 26x74 inches overall Regular finish is grey enamel, baked on. Also furnished in baked white enamel; hot galvanized and aluminum finished at small additional charge.

Berth Complete with Hooks, Chains and Cushion

Each

Kapak Filled, Artificially Leathered on All Sides..\$30.00
Berth Only with Hooks and Chains 8.75

Special Sizes and Shapes Made to Order

SPRING COTTERS



BEVELED POINTS

Made of half round spring wire, inserts easily, even though there be mis-alignment of burred surfaces, and when driven automatically spread. Length measured under head to end of point.

BRASS COTTERS
Per Thousand

| Length, Inches | Diameter, Inch | | | | | | | |
|-------------------|----------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|
| | $\frac{1}{8}$ | $\frac{3}{16}$ | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{3}{4}$ |
| $\frac{1}{2}$ | \$2.80 | \$3.20 | \$4.40 | | | | | |
| $\frac{3}{4}$ | 3.60 | 4.24 | 6.00 | \$9.60 | \$13.60 | | | |
| 1 | 4.40 | 5.20 | 7.20 | 11.60 | 16.40 | \$27.20 | \$42.40 | |
| $1\frac{1}{4}$ | 5.20 | 6.24 | 8.80 | 13.60 | 19.20 | 32.00 | 49.60 | |
| $1\frac{1}{2}$ | 6.00 | 7.20 | 10.00 | 15.60 | 22.00 | 36.80 | 56.80 | \$84.00 |
| $1\frac{3}{4}$ | 7.60 | 8.24 | 11.60 | 17.60 | 24.80 | 41.60 | 64.40 | |
| 2 | 8.40 | 9.20 | 12.80 | 14.60 | 27.60 | 46.40 | 72.00 | 104.00 |
| $2\frac{1}{4}$ | | | | 21.60 | 30.40 | 51.20 | 79.20 | |
| $2\frac{1}{2}$ | | 12.40 | 16.00 | 23.60 | 33.20 | 56.00 | 86.40 | 124.00 |
| 3 | | | 20.00 | 27.60 | 40.00 | 62.40 | 93.60 | 144.00 |
| $3\frac{1}{2}$ | | | | | 46.00 | 68.80 | 111.20 | 164.00 |
| 4 | | | | | | 52.00 | 75.20 | 123.80 |
| 5 | | | | | | | 146.40 | 216.00 |
| 6 | | | | | | | | 248.00 |

BRASS WOOD SCREWS



Flat Head

Round Head

Manufacturers Standard List in Effect January 3, 1928
PER GROSS

| Gauge Nos. | Length, Inches | | | | | | | |
|------------|----------------|--------|--------|--------|--------|--------|--------|--------|
| | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | 1 1/4 |
| 0 | \$0.26 | \$0.28 | .... | .... | .... | .... | .... | .... |
| 1 | .28 | .30 | \$0.34 | .... | .... | .... | .... | .... |
| 2 | .30 | .32 | .36 | \$0.38 | \$0.42 | .... | .... | .... |
| 3 | .32 | .34 | .38 | .40 | .45 | .... | .... | .... |
| 4 | .34 | .36 | .40 | .45 | .50 | \$0.55 | \$0.60 | .... |
| 5 | .... | .40 | .45 | .50 | .55 | .60 | .70 | .... |
| 6 | .... | .45 | .50 | .55 | .60 | .70 | .80 | \$0.90 |
| 7 | .... | .... | .55 | .60 | .70 | .80 | .90 | 1.00 |
| 8 | .... | .... | .65 | .70 | .80 | .90 | 1.00 | 1.10 |
| 9 | .... | .... | .... | .80 | .90 | 1.00 | 1.10 | 1.25 |
| 10 | .... | .... | .... | .90 | 1.00 | 1.10 | 1.20 | 1.40 |
| 11 | .... | .... | .... | .... | 1.10 | 1.20 | 1.30 | 1.55 |
| 12 | .... | .... | .... | .... | 1.25 | 1.40 | 1.55 | 1.80 |
| 14 | .... | .... | .... | .... | .... | .... | 1.95 | 2.30 |

| Gauge Nos. | Length, Inches | | | | | | |
|------------|----------------|--------|--------|--------|--------|--------|--------|
| | 1 1/2 | 1 3/4 | 2 | 2 1/4 | 2 1/2 | 3 | 3 1/2 |
| 6 | \$1.00 | .... | .... | .... | .... | .... | .... |
| 7 | 1.20 | .... | .... | .... | .... | .... | .... |
| 8 | 1.30 | \$1.45 | \$1.65 | .... | .... | .... | .... |
| 9 | 1.40 | 1.65 | 1.85 | .... | .... | .... | .... |
| 10 | 1.65 | 1.85 | 2.05 | \$2.30 | \$2.55 | .... | .... |
| 11 | 1.80 | 2.05 | 2.30 | 2.55 | 2.80 | .... | .... |
| 12 | 2.10 | 2.40 | 2.70 | 3.00 | 3.25 | \$3.90 | \$4.80 |
| 14 | 2.65 | 3.00 | 3.45 | 3.65 | 4.25 | 4.95 | 6.00 |
| 16 | .... | .... | 4.10 | 4.45 | 5.00 | 5.90 | 7.10 |
| 18 | .... | .... | 4.80 | 5.40 | 6.00 | 7.20 | 8.75 |

The following varieties of screws are invoiced from this list at varying discounts: Flat, round, filister and oval-head screws of brass, bronze, metal, nickel and silver-plated brass.

IRON WOOD SCREWS



Flat Head

Round Head

Manufacturers Standard List in Effect January 3, 1928
PER GROSS

| Gauge Nos. | Length, Inches | | | | | | | | | |
|------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | 1 1/4 | 1 1/2 | 1 3/4 |
| 0 | \$0.24 | \$0.26 | .... | .... | .... | .... | .... | .... | .... | .... |
| 1 | .24 | .26 | \$0.28 | .... | .... | .... | .... | .... | .... | .... |
| 2 | .24 | .26 | .28 | \$0.30 | \$0.32 | .... | .... | .... | .... | .... |
| 3 | .24 | .26 | .28 | .30 | .32 | \$0.34 | \$0.36 | .... | .... | .... |
| 4 | .24 | .26 | .28 | .30 | .32 | .34 | .36 | \$0.38 | \$0.40 | .... |
| 5 | .... | .26 | .28 | .30 | .32 | .34 | .36 | .40 | .44 | .... |
| 6 | .... | .28 | .30 | .32 | .34 | .36 | .38 | .42 | .46 | \$0.50 |
| 7 | .... | .30 | .32 | .34 | .36 | .38 | .40 | .44 | .48 | .55 |
| 8 | .... | .32 | .34 | .36 | .38 | .40 | .44 | .46 | .50 | .60 |
| 9 | .... | .... | .36 | .38 | .40 | .44 | .46 | .50 | .55 | .65 |
| 10 | .... | .... | .38 | .40 | .42 | .46 | .50 | .55 | .60 | .70 |
| 11 | .... | .... | .... | .42 | .46 | .50 | .55 | .60 | .65 | .75 |
| 12 | .... | .... | .... | .46 | .50 | .55 | .60 | .65 | .70 | .80 |
| 14 | .... | .... | .... | .... | .65 | .70 | .75 | .80 | .90 | 1.00 |
| 16 | .... | .... | .... | .... | .... | .... | .90 | 1.00 | 1.10 | 1.20 |
| 18 | .... | .... | .... | .... | .... | .... | .... | 1.15 | 1.25 | 1.35 |
| 20 | .... | .... | .... | .... | .... | .... | .... | .... | 1.60 | 1.75 |

| Gauge Nos. | Length, Inches | | | | | | |
|------------|----------------|--------|--------|--------|--------|--------|--------|
| | 2 | 2 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/2 | 4 |
| 6 | \$0.55 | \$0.60 | \$0.65 | .... | .... | .... | .... |
| 7 | .60 | .65 | .70 | .... | .... | .... | .... |
| 8 | .65 | .70 | .75 | \$0.75 | \$0.80 | .... | .... |
| 9 | .70 | .75 | .80 | .80 | .85 | .... | .... |
| 10 | .75 | .80 | .85 | .90 | 1.00 | \$1.25 | .... |
| 11 | .80 | .85 | .90 | 1.00 | 1.15 | 1.40 | .... |
| 12 | .85 | .90 | 1.00 | 1.10 | 1.35 | 1.60 | \$1.90 |
| 14 | 1.10 | 1.20 | 1.30 | 1.45 | 1.70 | 2.00 | \$2.60 |
| 16 | 1.30 | 1.40 | 1.60 | 1.80 | 2.05 | 2.40 | 3.00 |
| 18 | 1.45 | 1.60 | 1.90 | 2.20 | 2.50 | 2.80 | 3.50 |
| 20 | 1.95 | 2.05 | 2.30 | 2.60 | 2.90 | 3.20 | 3.60 |
| 24 | .... | .... | .... | .... | 4.00 | 4.50 | 5.10 |

Note—Lengths and diameters not listed are special, but when required in sufficient quantities can be made to order. Such sizes take the list of the next longer or larger sizes.

EVERDUR WOOD SCREWS



Oval Head



Flat Head



Round Head

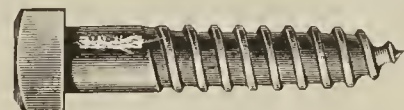
Have all the non-rusting and corrosion resistant qualities of copper and a strength approaching that of steel. Recommended for marine construction where condition of unusual stress, exposure to severe weather and corrosion must be met. Is a copper, silicon-manganese alloy.

FLAT HEAD SCREWS
PER GROSS

STOCK SIZES

| | Inches | | | | | | | | | | |
|--------|--------|--------|------|------|-------|-------|------|-------|-------|------|------|
| | 1/2 | 3/4 | 7/8 | 1 | 1 1/4 | 1 1/2 | 2 | 2 1/4 | 2 1/2 | 3 | 4 |
| 4.... | \$0.45 | \$0.50 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 5.... | | .55 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 6.... | | .60 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 7.... | | .70 | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 8.... | | .80 | .90 | 1.00 | 1.10 | 1.30 | 1.65 | .... | .... | .... | .... |
| 10.... | | | 1.10 | 1.20 | 1.40 | 1.65 | 2.05 | 2.30 | .... | .... | .... |
| 12.... | | | 1.40 | 1.55 | 1.80 | 2.10 | 2.70 | 3.00 | 3.25 | .... | .... |
| 14.... | | | | 2.30 | 2.65 | 3.45 | 3.65 | 4.25 | .... | .... | .... |
| 16.... | | | | | | | | | 5.90 | 7.10 | .... |

EVERDUR LAG SCREWS

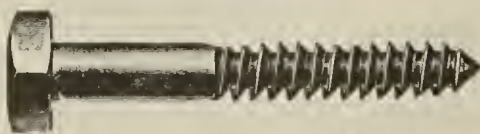


| Length Under Head, Inches | Per Hundred | | | |
|---------------------------|-------------|---------|---------|---------|
| | 1/4 | 3/8 | 1/2 | 5/8 |
| 2 | \$11.50 | .... | .... | .... |
| 2 1/2 | 12.00 | .... | .... | .... |
| 3 | 12.50 | \$15.00 | \$20.00 | .... |
| 4 | .... | 16.60 | 22.40 | \$34.00 |
| 5 | .... | 18.20 | 24.80 | 38.00 |
| 6 | .... | 19.80 | 27.40 | 42.00 |

EVERDUR HANGER BOLTS

| Diam. | Inches | | | |
|-------|---------|---------|---------|---------|
| | 3 | 4 | 5 | 6 |
| 3/8 | \$17.00 | \$18.60 | \$20.20 | \$21.80 |
| 1/2 | 23.20 | 23.20 | 28.00 | 30.40 |
| 5/8 | .... | .... | 30.40 | 44.00 |

LAG SCREWS
GALVANIZED



WITH MANUFACTURERS STANDARD SQUARE
HEADS AND CONE OR GIMLET POINTS
Manufacturers Standard List in Effect April 1, 1927
Price per Hundred

| Length, Inches | Diameter, Inch | | | | | | | |
|-------------------|----------------|--------|--------|--------|--------|---------|---------|---------|
| | 1/4 & 5/16 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | |
| 1 | \$2.35 | \$2.85 | \$4.25 | \$5.25 | ..... | ..... | ..... | ..... |
| 1 1/2 | 2.15 | 2.60 | 3.90 | 4.85 | \$7.95 | \$12.50 | ..... | ..... |
| 2 | 2.35 | 2.85 | 3.55 | 4.45 | 7.40 | 11.75 | \$18.60 | \$28.40 |
| 2 1/2 | 2.55 | 3.10 | 3.90 | 4.85 | 6.85 | 11.00 | 17.60 | 27.10 |
| 3 | 2.80 | 3.40 | 4.30 | 5.30 | 7.50 | 11.90 | 16.80 | 26.05 |
| 3 1/2 | 3.05 | 3.70 | 4.70 | 5.75 | 8.15 | 12.80 | 18.00 | 25.00 |
| 4 | 3.30 | 4.00 | 5.10 | 6.20 | 8.80 | 13.70 | 19.20 | 26.55 |
| 4 1/2 | 3.55 | 4.30 | 5.50 | 6.65 | 9.45 | 14.60 | 20.40 | 28.10 |
| 5 | 3.80 | 4.65 | 5.90 | 7.10 | 10.10 | 15.50 | 21.60 | 29.65 |
| 5 1/2 | 4.05 | 5.00 | 6.30 | 7.55 | 10.75 | 16.40 | 22.80 | 31.20 |
| 6 | 4.35 | 5.35 | 6.70 | 8.00 | 11.40 | 17.30 | 24.00 | 32.75 |
| 6 1/2 | 4.65 | 5.70 | 7.10 | 8.45 | 12.05 | 18.20 | 25.20 | 34.30 |
| 7 | 4.95 | 6.05 | 7.50 | 8.90 | 12.70 | 19.10 | 26.40 | 35.85 |
| 7 1/2 | 5.25 | 6.40 | 7.90 | 9.35 | 13.35 | 20.00 | 27.60 | 37.40 |
| 8 | 5.55 | 6.75 | 8.30 | 9.80 | 14.00 | 20.90 | 28.80 | 38.95 |
| 9 | 6.15 | 7.45 | 9.10 | 10.70 | 15.20 | 22.65 | 31.00 | 41.80 |
| 10 | 6.75 | 8.15 | 9.90 | 11.60 | 16.40 | 24.40 | 33.20 | 44.65 |
| 11 | ... | 8.90 | 10.80 | 12.60 | 17.70 | 26.25 | 35.50 | 47.65 |
| 12 | ... | 9.65 | 11.70 | 13.60 | 19.00 | 28.10 | 37.90 | 50.75 |
| 13 | ... | ..... | ..... | ..... | 20.30 | 29.95 | 40.50 | 54.25 |
| 14 | ... | ..... | ..... | ..... | 21.60 | 31.85 | 43.10 | 57.75 |
| 15 | ... | ..... | ..... | ..... | 22.90 | 33.75 | 45.75 | 61.35 |
| 16 | ... | ..... | ..... | ..... | 24.20 | 35.65 | 48.40 | 64.95 |

Extras to be Added

| Diam., Inch | For Skein Bolts | Mfgs. Standard Hexagon Head | | U.S.S. Hexagon Head | Diam., Inch | For Skein Bolts | Mfgs. Standard Hexagon Head | | U.S.S. Hexagon Head |
|----------------|-----------------------|--------------------------------------|--------|---------------------------|----------------|-----------------------|--------------------------------------|--------|---------------------------|
| | | | | | | | | | |
| 1/4 & 5/16 | | \$0.50 | \$0.20 | \$0.40 | 5/8 | | \$2.25 | \$1.00 | \$2.00 |
| 3/8 | | .70 | .30 | .60 | 3/4 | | 3.25 | 1.40 | 2.50 |
| 1/2 | | 1.00 | .45 | .90 | 7/8 | | 5.00 | 2.20 | 3.50 |
| 3/4 | | 1.50 | .65 | 1.30 | 1 | | 7.00 | 3.00 | 5.00 |

On order lag bolts furnished in paper without extra charge, in the following sizes: 1/4 inch diameter to 4 inches, 1/2 to 6 inches; 3/8, 1/2 and 5/8 to 8 inches and 3/4 inch to 12 inches. Larger sizes carry an extra of 15 percent.

Approximate Weight Per Hundred, Pounds

| Length, Inches | Diameter, Inch | | | | | | | |
|-------------------|----------------|------|------|------|-------|-------|-------|-------|
| | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | |
| 1 | 2.9 | 4.3 | 7.3 | 10.2 | ..... | ..... | ..... | ..... |
| 1 1/2 | 3.8 | 5.4 | 8.4 | 11.4 | ..... | ..... | ..... | ..... |
| 2 | 4.7 | 6.6 | 10.2 | 13.8 | 22.2 | ..... | ..... | ..... |
| 2 1/2 | 5.6 | 7.9 | 11.9 | 16.1 | 26.0 | 41.0 | ..... | ..... |
| 3 | 6.5 | 9.1 | 13.6 | 18.4 | 29.8 | 46.5 | 64.8 | ... |
| 3 1/2 | 7.4 | 10.4 | 15.4 | 20.8 | 33.7 | 52.0 | 72.5 | 103 |
| 4 | 8.3 | 11.6 | 17.1 | 23.1 | 37.5 | 57.5 | 80.2 | 113 |
| 4 1/2 | 9.2 | 12.9 | 18.9 | 25.5 | 41.4 | 63.0 | 87.9 | 123 |
| 5 | 10.1 | 14.1 | 20.6 | 27.8 | 45.2 | 68.5 | 95.6 | 133 |
| 5 1/2 | 11.0 | 15.4 | 22.4 | 30.2 | 49.1 | 74.0 | 103.3 | 143 |
| 6 | 11.9 | 16.6 | 24.1 | 32.5 | 52.9 | 79.5 | 111.0 | 153 |
| 6 1/2 | 12.8 | 18.3 | 25.8 | 34.8 | 56.7 | 85.0 | 118.7 | 163 |
| 7 | 13.7 | 19.1 | 27.6 | 37.2 | 60.6 | 90.5 | 126.4 | 173 |
| 7 1/2 | 14.6 | 20.8 | 29.3 | 39.5 | 64.4 | 96.0 | 135.1 | 183 |
| 8 | 15.5 | 21.6 | 31.1 | 41.9 | 68.3 | 101.5 | 141.8 | 193 |
| 9 | 17.3 | 24.1 | 34.6 | 46.6 | 76.0 | 112.5 | 157.2 | 213 |
| 10 | 19.1 | 26.6 | 38.1 | 51.3 | 83.7 | 123.5 | 172.6 | 233 |
| 11 | 20.9 | 29.1 | 41.6 | 56.0 | 91.4 | 134.5 | 188.0 | 253 |
| 12 | 22.7 | 31.6 | 45.1 | 60.7 | 99.1 | 145.5 | 203.4 | 273 |
| 13 | 25.1 | 34.9 | 50.1 | 67.5 | 110.1 | 151.3 | 228.1 | 309 |
| 14 | 27.4 | 38.2 | 55.2 | 74.4 | 121.2 | 181.0 | 252.8 | 346 |
| 15 | 29.2 | 40.7 | 58.5 | 79.1 | 129.8 | 192.0 | 267.7 | 366 |
| 16 | 31.0 | 43.2 | 62.2 | 83.8 | 136.6 | 203.0 | 283.6 | 386 |

BRASS LAG SCREWS



SQUARE HEAD—GIMLET POINT

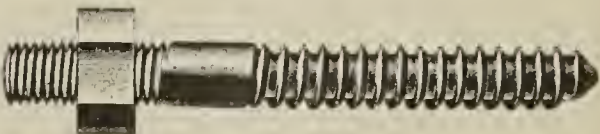
Length of threads is approximately three-fifths the length of screw, and the length of the screw is measured under the head.

PER HUNDRED

| Length, Inches | Diameter of Screw, Inch | | | |
|-------------------|-------------------------|---------|---------|---------|
| | 1/4 | 5/16 | 3/8 | 1/2 |
| 1 1/2 | \$11.00 | \$12.00 | \$12.90 | ..... |
| 2 | 11.50 | 12.50 | 13.25 | \$16.20 |
| 2 1/2 | 12.00 | 13.15 | 14.20 | 17.05 |
| 3 | 12.50 | 13.80 | 15.00 | 17.90 |
| 3 1/2 | 13.00 | 14.45 | 15.80 | 18.75 |
| 4 | 13.50 | 15.10 | 16.60 | 19.60 |
| 4 1/2 | 14.00 | 15.75 | 17.40 | 20.50 |
| 5 | 14.50 | 16.40 | 18.20 | 21.50 |
| 5 1/2 | 15.00 | 17.05 | 19.00 | 22.50 |
| 6 | 15.50 | 17.70 | 19.80 | 23.50 |
| 7 | 16.50 | 19.00 | 21.40 | 25.50 |
| 8 | 17.50 | 20.30 | 23.00 | 27.50 |
| 9 | 18.50 | 21.60 | 24.60 | 29.50 |
| 10 | 19.50 | 22.90 | 26.20 | 31.50 |
| 11 | 20.50 | 24.20 | 27.80 | 33.50 |
| 12 | 21.50 | 25.50 | 29.40 | 35.50 |

| Length, Inches | Diameter of Screw, Inch | | |
|-------------------|-------------------------|---------|---------|
| | 1/2 | 5/8 | 3/4 |
| 2 | \$17.75 | \$26.00 | \$38.50 |
| 2 1/2 | 18.85 | 28.00 | 40.75 |
| 3 | 20.00 | 30.00 | 43.00 |
| 3 1/2 | 21.20 | 32.00 | 45.85 |
| 4 | 22.40 | 34.00 | 48.70 |
| 4 1/2 | 23.60 | 36.00 | 51.55 |
| 5 | 24.80 | 38.00 | 54.40 |
| 5 1/2 | 26.10 | 40.00 | 57.25 |
| 6 | 27.40 | 42.00 | 60.10 |
| 7 | 30.00 | 46.00 | 65.85 |
| 8 | 32.60 | 50.00 | 71.55 |
| 9 | 35.20 | 54.00 | 77.25 |
| 10 | 37.80 | 58.00 | 82.95 |
| 11 | 40.40 | 62.00 | 88.65 |
| 12 | 43.00 | 66.00 | 94.35 |

BRASS HANGER SCREWS



WITH HEXAGON NUT

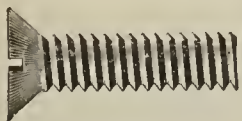
One end cut with deep screw thread, finished points, other end fitted with chamfered square nuts.

PER HUNDRED

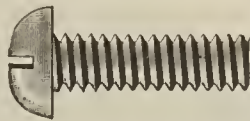
| Length, Inches | Diameter of Screw, Inch | | | | |
|-------------------|-------------------------|---------|---------|---------|---------|
| | 3/8 | 1/2 | 5/8 | 3/4 | 1 |
| 3 | \$17.00 | \$20.00 | \$23.20 | \$32.00 | \$44.00 |
| 3 1/2 | 17.80 | 21.00 | 24.40 | 34.00 | 46.85 |
| 4 | 18.60 | 22.00 | 25.60 | 36.00 | 49.70 |
| 5 | 20.20 | 24.00 | 28.00 | 40.00 | 56.40 |
| 6 | 21.80 | 26.00 | 30.40 | 44.00 | 62.20 |
| 7 | 23.40 | 28.00 | 32.80 | 48.00 | 67.70 |
| 8 | 25.00 | 30.00 | 35.20 | 52.00 | 73.40 |
| 9 | 26.60 | 32.00 | 37.60 | 56.00 | 79.10 |
| 10 | 28.20 | 34.00 | 40.00 | 60.00 | 84.80 |
| 11 | 29.80 | 36.00 | 42.40 | 64.00 | 90.50 |
| 12 | 31.40 | 38.00 | 44.80 | 68.00 | 96.20 |

"Locks and Latches for Doors and Hatches"

BRASS MACHINE SCREWS



Flat Head



Round Head

PER GROSS

| Threads per Inch | Length, Inches | | | | | | | | | | |
|---------------------|---------------------------------------|---------------|---------------|---------------|---------------|--|----------------|---------------|---------------|---------------|---------------|
| | A. S. M. E. Coarse and U. S. Standard | | | | | A. S. M. E. Fine and S. A. E. Standard | | | | | |
| | 56 | 48 | 40 | 32 | 32 | 24 | 24 | 20 | 18 | 16 | 13 |
| Diam. Nos. | 64 | 56 | 40 | 40 | 36 | 32 | 28 | 28 | 24 | 24 | 20 |
| | $\frac{1}{4}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{7}{8}$ | $1\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{1}{2}$ |
| $\frac{1}{8}$ | \$0.28 | \$0.34 | \$0.40 | \$0.52 | .... | .... | .... | .... | .... | .... | .... |
| $\frac{3}{8}$ | .30 | .36 | .42 | .54 | \$0.70 | \$0.95 | .... | .... | .... | .... | .... |
| $\frac{1}{4}$ | .32 | .38 | .44 | .58 | .76 | 1.05 | \$1.60 | .... | .... | .... | .... |
| $\frac{5}{8}$ | .34 | .40 | .46 | .62 | .82 | 1.15 | 1.70 | \$2.30 | .... | .... | .... |
| $\frac{3}{8}$ | .36 | .42 | .48 | .66 | .88 | 1.25 | 1.80 | 2.40 | \$4.60 | .... | .... |
| $\frac{7}{8}$ | .38 | .44 | .50 | .70 | .94 | 1.35 | 1.90 | 2.50 | 4.80 | .... | .... |
| $\frac{1}{2}$ | .40 | .46 | .54 | .76 | 1.02 | 1.45 | 2.00 | 2.65 | 5.00 | \$7.10 | .... |
| $\frac{5}{8}$ | .44 | .52 | .62 | .92 | 1.20 | 1.75 | 2.20 | 2.95 | 5.40 | \$7.70 | .... |
| $\frac{3}{4}$ | .50 | .58 | .68 | 1.00 | 1.30 | 1.90 | 2.40 | 3.15 | 5.80 | 8.20 | .... |
| $\frac{7}{8}$ | .56 | .66 | .74 | 1.10 | 1.45 | 2.05 | 2.60 | 3.45 | 6.30 | 8.90 | .... |
| 1 | .... | .... | .82 | 1.20 | 1.60 | 2.20 | 2.80 | 3.75 | 6.80 | 9.60 | \$18.50 |
| $1\frac{1}{8}$ | .... | .... | .90 | 1.30 | 1.75 | 2.35 | 3.00 | 4.05 | 7.30 | 10.30 | 22.10 |
| $1\frac{1}{4}$ | .... | .... | 1.00 | 1.45 | 1.90 | 2.55 | 3.25 | 4.35 | 7.80 | 11.00 | 22.10 |
| $1\frac{1}{2}$ | .... | .... | 1.25 | 1.65 | 2.15 | 2.90 | 3.75 | 4.95 | 8.50 | 12.10 | 26.65 |
| $1\frac{3}{4}$ | .... | .... | .... | 1.95 | 2.45 | 3.35 | 4.25 | 5.55 | 9.30 | 13.40 | 28.10 |
| 2 | .... | .... | .... | 2.25 | 2.75 | 3.80 | 4.75 | 6.15 | 10.40 | 14.70 | 30.20 |
| $2\frac{1}{4}$ | .... | .... | .... | .... | 3.10 | 4.25 | 5.25 | 6.75 | 11.50 | 16.20 | 32.95 |
| $2\frac{1}{2}$ | .... | .... | .... | .... | 3.45 | 4.75 | 5.75 | 7.35 | 12.60 | 17.80 | 35.65 |
| $2\frac{3}{4}$ | .... | .... | .... | .... | 3.80 | 5.25 | 6.25 | 8.00 | 13.70 | 19.50 | 38.15 |
| 3 | .... | .... | .... | .... | 4.15 | 5.75 | 6.75 | 8.65 | 14.90 | 21.60 | 40.65 |

Note—Lengths, diameters, and threads per inch not listed are special, but are furnished to the extent that they may be in stock, or when required in sufficient quantities of a size to warrant being made to order.

IRON MACHINE SCREWS



Flat Head



Round Head

Manufacturers' Standard List in Effect April 2, 1928

PER GROSS

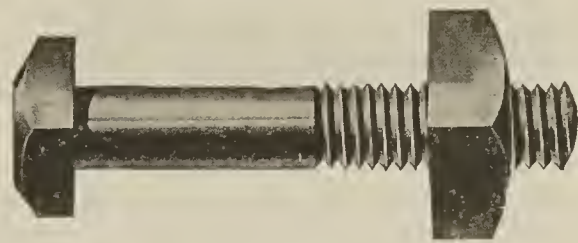
| Threads per Inch | Length, Inches | | | | | | | | | | |
|---------------------|---------------------------------------|---------------|---------------|---------------|---------------|--|----------------|---------------|---------------|---------------|---------------|
| | A. S. M. E. Coarse and U. S. Standard | | | | | A. S. M. E. Fine and S. A. E. Standard | | | | | |
| | 56 | 48 | 40 | 32 | 32 | 24 | 24 | 20 | 18 | 16 | 13 |
| Diam. Nos. | 64 | 56 | 48 | 40 | 36 | 32 | 28 | 28 | 24 | 24 | 20 |
| | $\frac{1}{4}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{7}{8}$ | $1\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{1}{2}$ |
| $\frac{1}{8}$ | \$0.24 | \$0.25 | \$0.26 | \$0.28 | .... | .... | .... | .... | .... | .... | .... |
| $\frac{3}{8}$ | .25 | .26 | .27 | .29 | \$0.35 | \$0.45 | .... | .... | .... | .... | .... |
| $\frac{1}{4}$ | .26 | .27 | .28 | .30 | .36 | .46 | \$0.64 | .... | .... | .... | .... |
| $\frac{5}{8}$ | .27 | .28 | .29 | .31 | .37 | .48 | .66 | \$0.80 | .... | .... | .... |
| $\frac{3}{8}$ | .28 | .29 | .30 | .32 | .39 | .50 | .68 | .84 | \$1.55 | .... | .... |
| $\frac{7}{8}$ | .29 | .30 | .31 | .34 | .41 | .52 | .70 | .88 | 1.60 | .... | .... |
| $\frac{1}{2}$ | .30 | .31 | .32 | .36 | .43 | .54 | .74 | .92 | 1.65 | \$2.20 | .... |
| $\frac{5}{8}$ | .32 | .33 | .34 | .40 | .47 | .58 | .82 | 1.00 | 1.75 | 2.40 | .... |
| $\frac{3}{4}$ | .33 | .34 | .36 | .43 | .49 | .62 | .86 | 1.05 | 1.80 | 2.50 | \$5.10 |
| $\frac{7}{8}$ | .34 | .36 | .38 | .46 | .53 | .66 | .92 | 1.10 | 1.90 | 2.65 | 5.85 |
| 1 | .... | .... | .42 | .50 | .57 | .70 | .98 | 1.20 | 2.00 | 2.85 | 6.60 |
| $1\frac{1}{8}$ | .... | .... | .46 | .54 | .63 | .76 | 1.04 | 1.30 | 2.10 | 3.05 | 7.00 |
| $1\frac{1}{4}$ | .... | .... | .52 | .58 | .69 | .82 | 1.10 | 1.40 | 2.25 | 3.25 | 7.35 |
| $1\frac{1}{2}$ | .... | .... | .60 | .68 | .82 | .95 | 1.24 | 1.60 | 2.45 | 3.55 | 8.00 |
| $1\frac{3}{4}$ | .... | .... | .... | .82 | .95 | 1.12 | 1.40 | 1.80 | 2.75 | 3.95 | 8.60 |
| 2 | .... | .... | .... | .96 | 1.08 | 1.30 | 1.60 | 2.00 | 3.05 | 4.40 | 9.40 |
| $2\frac{1}{4}$ | .... | .... | .... | .... | 1.25 | 1.50 | 1.80 | 2.25 | 3.35 | 4.85 | 10.30 |
| $2\frac{1}{2}$ | .... | .... | .... | .... | 1.45 | 1.70 | 2.05 | 2.50 | 3.65 | 5.40 | 11.50 |
| $2\frac{3}{4}$ | .... | .... | .... | .... | 1.65 | 1.95 | 2.30 | 2.75 | 4.00 | 6.00 | 12.40 |
| 3 | .... | .... | .... | .... | 1.85 | 2.15 | 2.60 | 3.10 | 4.40 | 6.60 | 13.60 |

Machine Bolt Packing

$\frac{1}{4}$ inch sizes packed 100 in a package; $\frac{5}{8}$ to $\frac{1}{2}$ inch x 6, 50 in a package, larger, 25 in a package.

MACHINE BOLTS

GALVANIZED AND PLAIN



CUT THREAD

WITH AMERICAN STANDARD
SQUARE HEADS AND SQUARE NUTS

Effective December 1, 1932

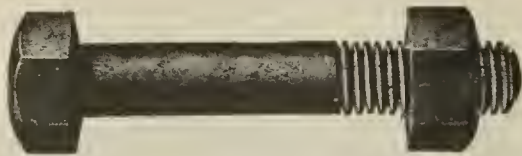
LIST PRICE PER 100 PIECES

| Length in Inches | Diameter in Inches | | | | | | | | | | |
|------------------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------|----------------|----------------|---------|---------|
| | $\frac{1}{4}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{7}{8}$ | 1 | $1\frac{1}{8}$ | $1\frac{1}{4}$ | | |
| $\frac{3}{4}$ | \$1.10 | \$1.70 | \$2.25 | .... | .... | .... | .... | .... | .... | .... | .... |
| 1 | 1.15 | 1.75 | 2.35 | \$3.95 | \$4.60 | \$8.10 | .... | .... | .... | .... | .... |
| $1\frac{1}{4}$ | 1.25 | 1.80 | 2.45 | 4.10 | 4.80 | 8.35 | .... | .... | .... | .... | .... |
| $1\frac{1}{2}$ | 1.30 | 1.95 | 2.60 | 4.25 | 5.00 | 8.60 | \$10.95 | \$16.70 | \$23.25 | .... | .... |
| 2 | 1.50 | 2.20 | 2.90 | 4.55 | 5.35 | 9.10 | 11.60 | 17.60 | 24.40 | .... | .... |
| $2\frac{1}{2}$ | 1.70 | 2.45 | 3.20 | 4.85 | 5.75 | 9.60 | 12.25 | 18.50 | 25.55 | .... | .... |
| 3 | 1.85 | 2.70 | 3.50 | 5.20 | 6.15 | 10.10 | 12.90 | 19.40 | 26.70 | \$45.90 | \$54.45 |
| $3\frac{1}{2}$ | 2.05 | 2.95 | 3.80 | 5.50 | 6.50 | 10.60 | 13.55 | 20.30 | 27.85 | 47.20 | 56.10 |
| 4 | 2.50 | 3.15 | 4.10 | 5.85 | 6.85 | 11.10 | 14.20 | 21.20 | 29.00 | 48.50 | 57.75 |
| $4\frac{1}{2}$ | 2.65 | 3.60 | 4.40 | 6.15 | 7.25 | 11.60 | 14.85 | 22.10 | 30.15 | 49.80 | 59.40 |
| 5 | 2.80 | 3.80 | 4.80 | 6.50 | 7.65 | 12.10 | 15.50 | 23.00 | 31.30 | 51.10 | 61.05 |
| $5\frac{1}{2}$ | 2.95 | 4.00 | 5.10 | 6.85 | 8.05 | 12.60 | 16.15 | 23.90 | 32.45 | 52.40 | 62.70 |
| 6 | 3.10 | 4.20 | 5.40 | 7.15 | 8.45 | 13.10 | 16.80 | 24.80 | 33.60 | 53.70 | 64.35 |
| $6\frac{1}{2}$ | 3.80 | 5.10 | 6.50 | 9.20 | 10.15 | 13.60 | 17.45 | 25.70 | 34.75 | 55.00 | 66.00 |
| 7 | 4.00 | 5.35 | 6.85 | 9.65 | 10.60 | 14.10 | 18.10 | 26.60 | 35.90 | 56.30 | 67.65 |
| $7\frac{1}{2}$ | 4.15 | 5.55 | 7.15 | 10.10 | 11.05 | 14.60 | 18.75 | 27.50 | 37.05 | 57.60 | 69.30 |
| 8 | 4.35 | 5.80 | 7.50 | 10.55 | 11.50 | 15.10 | 19.40 | 28.40 | 38.20 | 58.90 | 70.95 |
| $8\frac{1}{2}$ | 4.50 | 6.00 | 7.80 | 11.00 | 11.95 | 15.60 | 20.05 | 29.30 | 39.35 | 60.20 | 72.60 |
| 9 | 4.70 | 6.25 | 8.15 | 11.45 | 12.40 | 16.10 | 20.70 | 30.20 | 40.50 | 61.50 | 74.25 |
| $9\frac{1}{2}$ | 4.85 | 6.45 | 8.45 | 11.95 | 12.85 | 16.60 | 21.35 | 31.10 | 41.65 | 62.80 | 75.90 |
| 10 | 5.05 | 6.70 | 8.80 | 12.35 | 13.30 | 17.10 | 22.00 | 32.00 | 42.80 | 64.10 | 77.55 |
| 11 | 5.40 | 7.15 | 9.50 | 13.20 | 14.70 | 18.10 | 23.30 | 33.80 | 45.10 | 66.70 | 80.85 |
| 12 | 5.75 | 7.60 | 10.20 | 14.05 | 15.60 | 19.10 | 24.60 | 35.60 | 47.40 | 69.30 | 84.15 |
| 13 | 6.30 | 8.25 | 11.30 | 15.35 | 16.50 | 20.10 | 25.90 | 37.40 | 49.70 | 71.90 | 87.45 |
| 14 | 6.60 | 8.70 | 11.95 | 16.20 | 17.40 | 21.10 | 27.20 | 39.20 | 52.00 | 74.50 | 90.75 |
| 15 | 6.95 | 9.15 | 12.60 | 17.15 | 18.30 | 22.10 | 28.50 | 41.00 | 54.30 | 77.10 | 94.05 |
| 16 | 7.25 | 9.60 | 13.25 | 18.05 | 19.20 | 23.10 | 29.80 | 42.80 | 56.60 | 79.70 | 97.35 |
| 17 | 7.60 | 10.05 | 13.90 | 18.95 | 20.10 | 24.10 | 31.10 | 44.60 | 58.90 | 82.30 | 100.65 |
| 18 | 7.90 | 10.50 | 14.55 | 19.85 | 21.00 | 25.10 | 32.40 | 46.40 | 61.20 | 84.90 | 103.95 |
| 19 | 8.25 | 10.95 | 15.20 | 20.75 | 21.90 | 26.10 | 33.70 | 48.20 | 63.50 | 87.50 | 107.25 |
| 20 | 8.60 | 11.40 | 15.85 | 21.65 | 22.80 | 27.10 | 35.00 | 50.00 | 65.80 | 90.10 | 110.55 |
| 21 | .... | .... | .... | .... | 23.70 | 28.10 | 36.30 | 51.80 | 68.10 | 92.70 | 113.85 |
| 22 | .... | .... | .... | .... | 24.60 | 29.10 | 37.60 | 53.60 | 70.40 | 95.30 | 117.15 |
| 23 | .... | .... | .... | .... | 25.50 | 30.10 | 38.90 | 55.40 | 72.70 | 97.90 | 120.45 |
| 24 | .... | .... | .... | .... | 26.40 | 31.10 | 40.20 | 57.20 | 75.00 | 100.50 | 123.75 |
| 25 | .... | .... | .... | .... | 27.30 | 32.10 | 41.50 | 59.00 | 77.30 | 103.10 | 127.05 |
| 26 | .... | .... | .... | .... | .... | .... | 42.80 | 60.80 | 79.60 | 105.70 | 130.35 |
| 27 | .... | .... | .... | .... | .... | .... | 44.10 | 62.60 | 81.90 | 108.30 | 133.65 |
| 28 | .... | .... | .... | .... | .... | .... | 45.40 | 64.40 | 84.20 | 110.90 | 136.95 |
| 29 | .... | .... | .... | .... | .... | .... | 46.70 | 66.20 | 86.50 | 113.50 | 140.25 |
| 30 | .... | .... | .... | .... | .... | .... | 48.00 | 68.00 | 88.80 | 116.10 | 143.55 |

Intermediate lengths take next higher list.

Price when permitted to dominate purchase consideration frequently means delay, disappointment and loss. Particularly is this true with marine fittings, which by the very nature of their use must reflect the price paid in the kinds of material and workmanship put into them, or for the strenuous service they must render.

BRASS MACHINE BOLTS



HEXAGON HEAD AND HEXAGON NUT

Length measured under head to extreme point. Muntz metal nuts. Can also be furnished with square head and nut.

PER HUNDRED

| Length, inches | Diameter of Bolt, Inch | | | |
|-------------------|------------------------|---------|---------|---------|
| | 1/4 | 5/16 | 3/8 | 7/16 |
| 2 | \$13.00 | \$15.30 | \$17.45 | \$20.50 |
| 2 1/2 | 13.50 | 16.10 | 18.25 | 21.50 |
| 3 | 14.00 | 16.90 | 19.05 | 22.50 |
| 3 1/2 | 14.50 | 17.70 | 19.85 | 23.50 |
| 4 | 15.00 | 18.50 | 20.65 | 24.50 |
| 4 1/2 | 15.50 | 19.30 | 21.45 | 25.50 |
| 5 | 16.00 | 20.10 | 22.25 | 26.50 |
| 5 1/2 | 16.50 | 20.90 | 23.05 | 27.50 |
| 6 | 17.00 | 21.70 | 23.85 | 28.50 |
| 7 | 18.00 | 23.30 | 25.45 | 30.50 |
| 8 | 19.00 | 24.90 | 27.05 | 32.50 |
| 9 | 20.00 | 26.50 | 28.65 | 34.50 |
| 10 | 21.00 | 28.10 | 30.25 | 36.50 |
| 11 | 22.00 | 29.70 | 31.85 | 38.50 |
| 12 | 23.00 | 31.30 | 33.45 | 40.50 |

| Length, Inches | Diameter of Bolt, Inch | | |
|-------------------|------------------------|---------|---------|
| | 1/2 | 3/4 | 1 |
| 2 | \$23.10 | \$33.80 | \$49.00 |
| 2 1/2 | 24.30 | 35.80 | 51.85 |
| 3 | 25.50 | 37.80 | 54.70 |
| 3 1/2 | 26.70 | 39.80 | 57.55 |
| 4 | 27.90 | 41.80 | 60.40 |
| 4 1/2 | 29.10 | 43.80 | 63.25 |
| 5 | 30.30 | 45.80 | 66.10 |
| 5 1/2 | 31.50 | 47.80 | 68.95 |
| 6 | 32.70 | 49.80 | 71.80 |
| 7 | 35.10 | 53.80 | 77.50 |
| 8 | 37.50 | 57.80 | 83.20 |
| 9 | 39.90 | 61.80 | 88.90 |
| 10 | 42.30 | 65.80 | 94.60 |
| 11 | 44.70 | 69.80 | 100.30 |
| 12 | 47.10 | 73.80 | 106.00 |

EVERDUR MACHINE BOLTS

HEXAGON HEAD AND HEXAGON NUT
U.S.S. THREAD

Combines the non-rusting and corrosion resistant qualities of copper with a strength approaching that of steel. A copper, silicon, manganese alloy. All bolts are cold headed for strength.

PER HUNDRED

| Length, Inches | Diameter of Bolt, Inch | | | | |
|-------------------|------------------------|---------|---------|----------|----------|
| | 1/4 | 3/8 | 1/2 | 3/4 | 1 |
| 1 3/4 | \$10.60 | \$22.90 | ..... | ..... | ..... |
| 2 | 11.40 | 24.55 | \$35.00 | ..... | ..... |
| 2 1/4 | ..... | ..... | 38.30 | ..... | ..... |
| 2 1/2 | 13.10 | 28.70 | 40.80 | ..... | ..... |
| 3 | 14.70 | 32.75 | 46.60 | ..... | ..... |
| 3 1/2 | 16.40 | 37.00 | ..... | ..... | ..... |
| 4 | ..... | 40.95 | 58.30 | ..... | ..... |
| 4 1/2 | ..... | 45.20 | 63.95 | ..... | ..... |
| 5 | ..... | 49.30 | 69.95 | \$100.80 | \$163.80 |
| 5 1/2 | ..... | ..... | 75.60 | 110.25 | 179.55 |
| 6 | ..... | 57.65 | 81.90 | 119.70 | ..... |
| 6 1/2 | ..... | ..... | ..... | 130.75 | 212.65 |
| 7 | ..... | 65.85 | ..... | ..... | ..... |

Carriage Bolt Packing

1/4 inch sizes packed 100 in a package; 3/8 to 1/2 inch x 6, 50 in a package, larger sizes, 25 in a package.

CARRIAGE BOLTS

GALVANIZED AND PLAIN



CUT THREAD
WITH AMERICAN STANDARD
SQUARE NUTS

Effective December 1, 1932

LIST PRICE PER 100 PIECES

| Length in Inches | Diameter in Inches | | | | | | |
|------------------------|--------------------|--------|--------|--------|--------|--------|---------|
| | 3/4 and 1 | 1 1/4 | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 |
| 3/4 | \$1.05 | \$1.60 | \$2.00 | ..... | ..... | ..... | ..... |
| 1 | 1.10 | 1.65 | 2.10 | \$3.50 | \$4.25 | ..... | ..... |
| 1 1/4 | 1.15 | 1.70 | 2.20 | 3.60 | 4.40 | \$8.35 | ..... |
| 1 1/2 | 1.20 | 1.80 | 2.35 | 3.75 | 4.60 | 8.60 | \$12.45 |
| 2 | 1.35 | 2.00 | 2.60 | 4.05 | 4.95 | 9.10 | 13.10 |
| 2 1/2 | 1.55 | 2.55 | 2.90 | 4.40 | 5.35 | 9.60 | 13.75 |
| 3 | 1.70 | 2.50 | 3.20 | 4.75 | 5.75 | 10.10 | 14.40 |
| 3 1/2 | 1.85 | 2.75 | 3.50 | 5.10 | 6.15 | 10.60 | 15.05 |
| 4 | 2.30 | 2.95 | 3.80 | 5.40 | 6.55 | 11.10 | 15.70 |
| 4 1/2 | 2.45 | 3.40 | 4.10 | 5.75 | 6.95 | 11.60 | 16.35 |
| 5 | 2.60 | 3.60 | 4.50 | 6.10 | 7.35 | 12.10 | 17.00 |
| 5 1/2 | 2.75 | 3.85 | 4.80 | 6.45 | 7.80 | 12.60 | 17.65 |
| 6 | 2.90 | 4.05 | 5.10 | 6.80 | 8.20 | 13.10 | 18.30 |
| 6 1/2 | 3.65 | 4.90 | 6.30 | 8.25 | 9.75 | 13.60 | 18.95 |
| 7 | 3.85 | 5.15 | 6.65 | 8.70 | 10.20 | 14.10 | 19.60 |
| 7 1/2 | 4.00 | 5.35 | 6.95 | 9.15 | 10.65 | 14.60 | 20.25 |
| 8 | 4.20 | 5.60 | 7.30 | 9.60 | 11.10 | 15.10 | 20.90 |
| 8 1/2 | 4.35 | 5.80 | 7.60 | 10.05 | 12.05 | 15.60 | 21.50 |
| 9 | 4.55 | 6.05 | 7.95 | 10.50 | 12.50 | 16.10 | 22.20 |
| 9 1/2 | 4.70 | 6.25 | 8.25 | 10.95 | 12.95 | 16.60 | 22.85 |
| 10 | 4.90 | 6.50 | 8.60 | 11.40 | 13.40 | 17.10 | 23.50 |
| 11 | 5.25 | 6.95 | 9.30 | 12.25 | 14.30 | 18.10 | 24.80 |
| 12 | 5.60 | 7.40 | 10.00 | 13.10 | 15.20 | 19.10 | 26.10 |
| 13 | 6.15 | 8.05 | 11.10 | 14.40 | 16.10 | 20.10 | 27.40 |
| 14 | 6.45 | 8.50 | 11.75 | 15.25 | 17.00 | 21.10 | 28.70 |
| 15 | 6.80 | 8.95 | 12.40 | 16.20 | 17.90 | 22.10 | 30.00 |
| 16 | 7.10 | 9.40 | 13.05 | 17.10 | 18.80 | 23.10 | 31.30 |
| 17 | 7.45 | 9.85 | 13.70 | 18.00 | 19.70 | 24.10 | 32.60 |
| 18 | 7.75 | 10.30 | 14.35 | 18.90 | 20.60 | 25.10 | 33.90 |
| 19 | 8.10 | 10.75 | 15.00 | 19.80 | 21.50 | 26.10 | 35.20 |
| 20 | 8.45 | 11.20 | 15.65 | 20.70 | 22.40 | 27.10 | 36.50 |

Intermediate lengths take next higher list.

APPROXIMATE WEIGHT PER HUNDRED, POUNDS

| Length, Inches | Diameter, Inch | | | | | | |
|-------------------|----------------|------|------|------|-------|-------|-------|
| | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 |
| 1 1/2 | 3.2 | 5.6 | 8.5 | 12.8 | 17.1 | 31.2 | ..... |
| 2 | 3.9 | 6.5 | 10.0 | 14.7 | 19.6 | 35.3 | ..... |
| 2 1/2 | 4.5 | 7.5 | 11.4 | 16.7 | 22.2 | 39.4 | 58.4 |
| 3 | 5.2 | 8.4 | 12.9 | 18.6 | 24.7 | 43.5 | 64.4 |
| 3 1/2 | 5.8 | 9.4 | 14.3 | 20.6 | 27.3 | 47.6 | 70.8 |
| 4 | 6.5 | 10.3 | 15.8 | 22.5 | 29.8 | 51.7 | 76.3 |
| 4 1/2 | 7.1 | 11.3 | 17.2 | 24.5 | 32.4 | 55.8 | 82.2 |
| 5 | 7.8 | 12.2 | 18.7 | 26.4 | 34.9 | 59.9 | 88.2 |
| 5 1/2 | 8.4 | 13.2 | 20.1 | 28.4 | 37.5 | 64.0 | 94.1 |
| 6 | 9.1 | 14.1 | 21.6 | 30.3 | 40.0 | 68.1 | 100.1 |
| 6 1/2 | 9.7 | 15.1 | 23.0 | 32.3 | 42.6 | 72.2 | 106.0 |
| 7 | 10.4 | 16.0 | 24.5 | 34.2 | 45.1 | 76.3 | 112.0 |
| 7 1/2 | 11.0 | 17.0 | 25.9 | 36.2 | 47.7 | 80.4 | 117.9 |
| 8 | 11.7 | 17.9 | 27.4 | 38.1 | 50.2 | 84.5 | 123.9 |
| 8 1/2 | 12.3 | 18.9 | 28.8 | 40.1 | 52.8 | 88.6 | 129.8 |
| 9 | 13.0 | 19.8 | 30.3 | 42.0 | 55.3 | 92.7 | 135.8 |
| 10 | 14.3 | 21.7 | 33.2 | 45.9 | 60.4 | 100.9 | 147.7 |
| 11 | 15.6 | 23.6 | 36.1 | 49.8 | 65.5 | 109.1 | 159.6 |
| 12 | 16.9 | 25.5 | 39.0 | 53.7 | 70.6 | 117.3 | 171.5 |
| 13 | 19.4 | 30.2 | 46.0 | 64.6 | 84.6 | 144.4 | 212.0 |
| 14 | 20.8 | 32.0 | 49.0 | 68.4 | 85.2 | 152.6 | 224.0 |
| 15 | 22.0 | 34.0 | 51.8 | 72.4 | 90.2 | 160.8 | 235.8 |
| 16 | 23.4 | 35.8 | 54.8 | 76.2 | 95.4 | 178.0 | 247.8 |
| 17 | 24.6 | 37.8 | 57.6 | 80.2 | 100.2 | 177.2 | 250.6 |
| 18 | 26.0 | 39.6 | 60.6 | 84.0 | 105.6 | 185.4 | 271.6 |
| 19 | 27.2 | 41.6 | 63.4 | 88.0 | 110.6 | 192.6 | 283.6 |
| 20 | 28.6 | 43.4 | 66.4 | 91.8 | 115.8 | 201.8 | 295.4 |

DECK BOLTS



GALVANIZED

Hot galvanized, pan head, square neck, with hot pressed square nuts. 1/2 inch diameter, heads are 1 1/8 x 1/4; 5/8 inch diameter, heads are 1 3/8 x 1/4.

For Prices Use Machine Bolt List

BRASS THUMB SCREWS



POLISHED

| Length, Inches | Diameter, Inch | Each |
|----------------|----------------|--------|
| 1 1/2 | 1/4 | \$0.30 |
| 1 1/2 | 5/16 | .34 |
| 1 1/2 | 3/8 | .38 |
| 2 | 1/4 | .34 |
| 2 | 5/16 | .38 |
| 2 | 3/8 | .42 |

BRASS STOVE BOLTS

WITH HEXAGON NUTS



Round Head



Flat Head

PER HUNDRED, WITH NUTS

| Length, Inches | 1/2 | 3/4 | 1 | 1 1/4 |
|----------------|--------|--------|--------|---------|
| 1/2 | \$2.56 | \$4.16 | ..... | ..... |
| 5/8 | 2.72 | 4.48 | ..... | ..... |
| 3/4 | 2.58 | 4.80 | ..... | ..... |
| 1 | 3.20 | 5.44 | \$9.60 | \$13.44 |
| 1 1/4 | 3.52 | 5.76 | 10.24 | 14.56 |
| 1 1/2 | 4.16 | 6.24 | 11.20 | 15.84 |
| 1 3/4 | 4.32 | 6.88 | 11.68 | 17.28 |
| 2 | 4.64 | 7.44 | 12.64 | 18.40 |
| 2 1/2 | 5.60 | 8.30 | 15.04 | 21.12 |
| 3 | 6.40 | 9.44 | 17.28 | 25.28 |
| 3 1/2 | 10.40 | 17.60 | 24.32 | 27.26 |
| 4 | 16.80 | 23.20 | 28.48 | 30.68 |
| 5 | ..... | 29.60 | 36.00 | 37.60 |
| 6 | ..... | 40.00 | 47.04 | 48.80 |

Note--Bolts 1 1/4-inch and smaller, threads are cut to the head. Longer bolts, threads are cut 1 1/2-inches long.

BOAT RIVETS

GALVANIZED



Open hearth basic steel, annealed soft, galvanized, old standard or Birmingham gauge.

Illustration shows a truss head rivet which form of head is most used by boat builders.

SPECIFICATIONS

| | |
|-------------------------------|------------|
| 1/8 inch up to 6 inches..... | \$0.30 lb. |
| 1/4 inch up to 6 inches..... | .29 lb. |
| 5/16 inch up to 6 inches..... | .28 lb. |
| 3/8 inch up to 6 inches..... | .27 lb. |
| Longer | .26 lb. |

IRON STOVE BOLTS

CADMIUM PLATED



Flat and Round Head

Large Head National Standard Thread

Flat head, measured overall from top of head to point
Round head measured from under head to point.

PER HUNDRED

| Length, Inches | 1/2 | 3/4 | 1 | 1 1/4 |
|----------------|--------|--------|--------|--------|
| 1 | \$0.90 | \$1.30 | \$1.85 | \$2.85 |
| 1 1/4 | 1.00 | 1.40 | 1.95 | 3.05 |
| 1 1/2 | 1.10 | 1.50 | 2.05 | 3.25 |
| 1 3/4 | 1.20 | 1.60 | 2.25 | 3.45 |
| 2 | 1.30 | 1.70 | 2.45 | 3.85 |
| 2 1/4 | 1.45 | 1.85 | 2.60 | 4.05 |
| 2 1/2 | 1.60 | 2.00 | 2.75 | 4.25 |
| 3 | 1.80 | 2.20 | 3.05 | 4.65 |
| 3 1/2 | 2.00 | 2.40 | 3.40 | 5.15 |
| 4 | 2.20 | 2.70 | 3.70 | 5.65 |
| 4 1/2 | .... | 3.00 | 4.00 | 6.15 |
| 5 | .... | 3.30 | 4.40 | 6.65 |
| 6 | .... | 3.90 | 5.20 | 7.65 |

Note--Bolts 2 inch and smaller, threads are cut to the head. Longer bolts, threads are cut 2 inches long.

BRASS CARRIAGE BOLTS



With hexagon Muntz metal nuts.

PER HUNDRED

| Length, Inches | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 |
|----------------|---------|---------|---------|---------|---------|
| 1 1/2 | \$12.00 | \$14.50 | \$16.00 | \$20.00 | ..... |
| 2 | 12.50 | 15.30 | 16.80 | 21.00 | \$23.00 |
| 2 1/2 | 13.00 | 16.10 | 17.60 | 22.00 | 24.30 |
| 3 | 13.50 | 16.90 | 18.40 | 23.00 | 25.60 |
| 3 1/2 | 14.00 | 17.20 | 19.20 | 24.00 | 26.90 |
| 4 | 14.50 | 18.00 | 20.00 | 25.00 | 28.20 |
| 4 1/2 | 15.00 | 18.80 | 21.80 | 26.00 | 29.50 |
| 5 | 15.50 | 19.60 | 22.60 | 27.00 | 30.80 |
| 5 1/2 | 16.00 | 20.40 | 23.40 | 28.00 | 32.10 |
| 6 | 16.50 | 21.20 | 24.20 | 29.00 | 33.40 |
| 7 | 18.00 | 23.20 | 26.20 | 31.50 | 36.40 |
| 8 | 19.50 | 25.20 | 28.20 | 34.00 | 39.40 |
| 9 | 21.00 | 27.20 | 30.20 | 36.50 | 42.40 |
| 10 | 22.50 | 29.20 | 32.20 | 39.00 | 45.40 |

| Length, Inches | Diameter of Bolt, Inch, 1/2 | Length, Inches | Diameter of Bolt, Inch, 3/4 | Length, Inches | Diameter of Bolt, Inch, 1 |
|----------------|-----------------------------|----------------|-----------------------------|----------------|---------------------------|
| 2 1/2 | \$42.50 | 4 1/2 | \$50.50 | 7 | \$61.50 |
| 3 | 44.50 | 5 | 52.50 | 8 | 66.50 |
| 3 1/2 | 46.50 | 5 1/2 | 54.50 | 9 | 71.50 |
| 4 | 48.50 | 6 | 56.50 | 10 | 76.50 |

CAP SCREWS

U. S. S. AND S. A. E. HEXAGON HEAD



On all U. S. Standard threads, 1 inch and less in diameter up to 4 inches long, threads are cut $\frac{3}{4}$ of the length; longer than 4 inches, threads are cut $\frac{1}{2}$ the length. S. A. E. Standard, the length of the threads is $1\frac{1}{2}$ times the diameter of the screw, plus $\frac{1}{4}$ inch. U. S. Standard and S. A. E. Standard all take same list prices. U. S. Standard threads furnished unless otherwise specified. Lengths measured under head.

Manufacturers' Standard List—January 22, 1930
Price per 100

| Diam. of Head Coarse (U.S.S.) Thread and Fine (S.A.E.) Thread | $\frac{1}{16}$ | $\frac{1}{8}$ | $\frac{9}{16}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{13}{16}$ | $\frac{7}{8}$ | 1 | $1\frac{1}{8}$ | $1\frac{1}{2}$ |
|---|----------------|-----------------|----------------|-----------------|---------------|-----------------|-----------------|----------------|-----------------|----------------|
| Height of Head Coarse (U.S.S.) Thread and Fine (S.A.E.) Thread | $\frac{3}{16}$ | $\frac{15}{64}$ | $\frac{9}{32}$ | $\frac{21}{64}$ | $\frac{3}{8}$ | $\frac{27}{64}$ | $\frac{15}{32}$ | $\frac{9}{16}$ | $\frac{21}{32}$ | $\frac{3}{4}$ |
| Threads per Inch | 20 | 18 | 16 | 14 | 13 | 12 | 11 | 10 | 9 | 8 |
| U.S.S. Coarse S.A.E. Fine | 28 | 24 | 24 | 20 | 20 | 18 | 18 | 16 | 14 | 14 |
| Diam. of Screw | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{7}{16}$ | $\frac{1}{2}$ | $\frac{9}{16}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{7}{8}$ | 1 |
| Length, inches, under Head to Extreme Point | 100 | in a box | 50 | in a box | 25 | in a box | 15 | in a box | 10 | in a box |
| $\frac{1}{2}$ | 3.90 | 4.20 | 5.30 | | | | | | | |
| $\frac{5}{8}$ | 4.00 | 4.30 | 5.50 | | | | | | | |
| $\frac{3}{4}$ | 4.10 | 4.50 | 5.70 | 7.60 | 11.10 | | | | | |
| $\frac{7}{8}$ | 4.30 | 4.90 | 5.90 | 8.00 | 11.80 | | | | | |
| 1 | 4.50 | 5.30 | 6.20 | 8.50 | 12.50 | 20.00 | 21.00 | | | |
| $1\frac{1}{4}$ | 5.00 | 5.90 | 6.90 | 9.30 | 13.00 | 21.40 | 22.50 | 33.00 | | |
| $1\frac{1}{2}$ | 5.50 | 6.50 | 7.60 | 10.30 | 14.70 | 22.80 | 24.00 | 35.00 | | |
| $1\frac{3}{4}$ | 6.10 | 7.10 | 8.30 | 11.40 | 15.80 | 24.20 | 25.60 | 37.00 | | |
| 2 | 6.70 | 7.80 | 9.10 | 12.50 | 16.90 | 25.00 | 27.20 | 39.00 | 60.00 | 90.00 |
| $2\frac{1}{4}$ | 7.30 | 8.50 | 9.90 | 13.60 | 18.10 | 27.00 | 28.80 | 41.00 | 63.00 | 95.00 |
| $2\frac{1}{2}$ | 8.00 | 9.20 | 10.70 | 14.70 | 19.30 | 28.40 | 30.40 | 43.00 | 66.00 | 100.00 |
| $2\frac{3}{4}$ | 8.70 | 10.00 | 11.50 | 15.80 | 20.50 | 29.80 | 32.00 | 45.00 | 69.00 | 105.00 |
| 3 | 9.40 | 10.80 | 12.40 | 16.90 | 21.70 | 31.20 | 33.60 | 47.00 | 72.00 | 110.00 |
| $3\frac{1}{4}$ | | | | 18.00 | 23.00 | 32.60 | 35.20 | 49.00 | 75.00 | 115.00 |
| $3\frac{1}{2}$ | | | | 19.10 | 24.30 | 34.00 | 36.80 | 51.50 | 80.00 | 122.00 |
| $3\frac{3}{4}$ | | | | 20.20 | 25.60 | 35.40 | 38.40 | 54.00 | 85.00 | 129.00 |
| 4 | | | | 21.30 | 26.90 | 36.80 | 40.00 | 56.50 | 90.00 | 136.00 |
| $4\frac{1}{2}$ | | | | | | | 43.20 | 61.50 | 100.00 | 150.00 |
| 5 | | | | | | | | | 110.00 | 164.00 |
| Add for Each $\frac{1}{4}$ inch | 1.50 | 1.75 | 2.00 | 2.25 | 2.75 | 3.50 | 4.50 | 5.50 | 10.00 | 14.00 |

Length of usable thread on Fine thread screws $1\frac{1}{2}$ x Body diameter + $\frac{1}{4}$ in.
Length of usable thread on Coarse thread screws 2 x Body diameter + $\frac{1}{4}$ in.
Screws too short to apply formula are threaded as close to head as practicable.
All orders should specify whether coarse or fine thread.

Quantity in a Package

| Diameter, Inch | Length, Inches | Number in a Box | Length Inches | Number in a Box |
|--|----------------------|--------------------|-------------------------|--------------------|
| $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{8}$ | All | 100 | | |
| $\frac{1}{2}$ | Up to $1\frac{1}{4}$ | 100 | $1\frac{1}{2}$ and Over | 50 |
| $\frac{9}{16}$ | Up to 1 | 100 | $1\frac{1}{4}$ and Over | 50 |
| $\frac{5}{8}$ | Up to 2 | 50 | $2\frac{1}{4}$ and Over | 25 |
| $\frac{3}{4}$ | Up to $1\frac{1}{4}$ | 50 | $1\frac{1}{2}$ and Over | 25 |

Specifications

| Diameter, Screw, Inches | Threads per Inch | U. S. S. | S. A. E. | Diameter Head, Inches | Height Head, Inches |
|-------------------------------|---------------------|----------|----------|-----------------------------|---------------------------|
| $\frac{1}{4}$ | 20 | | 28 | $\frac{7}{16}$ | $\frac{3}{8}$ |
| $\frac{5}{16}$ | 18 | | 24 | $\frac{1}{2}$ | $\frac{13}{16}$ |
| $\frac{3}{8}$ | 16 | | 24 | $\frac{9}{16}$ | $\frac{13}{16}$ |
| $\frac{7}{16}$ | 14 | | 20 | $\frac{5}{8}$ | $\frac{13}{16}$ |
| $\frac{1}{2}$ | 12, 13 | | 20 | $\frac{3}{4}$ | $\frac{13}{16}$ |
| $\frac{5}{8}$ | 12 | | 18 | $\frac{7}{8}$ | $\frac{13}{16}$ |
| $\frac{3}{4}$ | 11 | | 18 | $1\frac{1}{8}$ | $\frac{13}{16}$ |
| $\frac{7}{8}$ | 10 | | 16 | $1\frac{1}{4}$ | $\frac{13}{16}$ |
| 1 | 9 | | 14 | $1\frac{1}{2}$ | $\frac{13}{16}$ |
| $1\frac{1}{8}$ | 8 | | .. | $1\frac{3}{4}$ | $1\frac{1}{8}$ |
| $1\frac{1}{4}$ | 7 | | .. | $1\frac{7}{8}$ | $1\frac{1}{4}$ |

Note—In ordering U. S. Standard screws $\frac{1}{2}$ inch diameter, state whether 12 or 13 threads per inch are wanted. The heads or Ferry cap screws are formed by proper compression in an ingenious matrix or die. Heat treatment insures uniformity in strength.

SET SCREWS



U. S. STANDARD THREADS

Case hardened steel square head with cup points; cut thread. Points of other shapes are special and made to order. Height of head equals three-fourths the diameter of the body of the screw.

Manufacturers' Standard List—February 1, 1924
Per Hundred

| Length, Inches | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ |
|-------------------|---------------|----------------|---------------|---------------|---------------|
| $\frac{1}{2}$ | \$2.80 | \$3.15 | \$3.65 | ..... | ..... |
| $\frac{5}{8}$ | 2.85 | 3.20 | 3.70 | \$5.35 | \$6.55 |
| $\frac{3}{4}$ | 2.90 | 3.25 | 3.75 | 5.45 | 6.65 |
| $\frac{7}{8}$ | 3.10 | 3.40 | 4.00 | 5.55 | 6.75 |
| 1 | 3.25 | 3.55 | 4.30 | 5.65 | 6.85 |
| $1\frac{1}{4}$ | 3.60 | 3.90 | 4.80 | 6.15 | 7.60 |
| $1\frac{1}{2}$ | 3.95 | 4.20 | 5.25 | 6.65 | 8.35 |
| $1\frac{3}{4}$ | 4.25 | 4.70 | 5.90 | 7.25 | 9.10 |
| 2 | 4.55 | 5.20 | 6.55 | 7.90 | 9.80 |
| $2\frac{1}{4}$ | 4.80 | 5.65 | 7.15 | 8.65 | 10.60 |
| $2\frac{1}{2}$ | 5.10 | 6.15 | 7.75 | 9.45 | 11.40 |
| $2\frac{3}{4}$ | 5.35 | 6.60 | 8.40 | 10.15 | 12.15 |
| 3 | 5.65 | 7.10 | 9.00 | 10.90 | 12.35 |
| $3\frac{1}{4}$ | ..... | ..... | ..... | 11.70 | 14.15 |
| $3\frac{1}{2}$ | ..... | ..... | ..... | 12.45 | 15.35 |
| $3\frac{3}{4}$ | ..... | ..... | ..... | 13.25 | 16.60 |
| 4 | ..... | ..... | ..... | 14.00 | 17.85 |

Per Hundred

| Length, Inches | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | 1 | $1\frac{1}{8}$ | $1\frac{1}{4}$ |
|-------------------|---------------|---------------|---------------|---------|----------------|----------------|
| $\frac{3}{4}$ | \$11.55 | ..... | ..... | ..... | ..... | ..... |
| $\frac{7}{8}$ | 11.75 | ..... | ..... | ..... | ..... | ..... |
| 1 | 11.95 | \$21.10 | ..... | ..... | ..... | ..... |
| $1\frac{1}{4}$ | 12.15 | 21.50 | \$35.70 | ..... | ..... | ..... |
| $1\frac{1}{2}$ | 12.35 | 21.90 | 36.20 | \$47.50 | ..... | ..... |
| $1\frac{3}{4}$ | 13.30 | 22.30 | 36.70 | 48.10 | \$62.55 | ..... |
| 2 | 14.20 | 22.70 | 37.20 | 48.70 | 63.25 | \$82.25 |
| $2\frac{1}{4}$ | 15.30 | 24.40 | 39.80 | 51.50 | 66.90 | 87.00 |
| $2\frac{1}{2}$ | 16.50 | 26.10 | 42.30 | 53.35 | 70.70 | 91.85 |
| $2\frac{3}{4}$ | 17.65 | 27.80 | 44.80 | 57.20 | 74.45 | 96.70 |
| 3 | 18.85 | 29.35 | 47.40 | 59.85 | 77.80 | 101.25 |
| $3\frac{1}{4}$ | 20.40 | 31.30 | 50.00 | 63.25 | 82.20 | 106.95 |
| $3\frac{1}{2}$ | 21.90 | 33.20 | 52.80 | 66.65 | 86.65 | 112.70 |
| $3\frac{3}{4}$ | 23.30 | 35.20 | 55.60 | 69.75 | 90.70 | 118.00 |
| 4 | 24.85 | 37.10 | 58.25 | 73.20 | 95.10 | 123.80 |
| $4\frac{1}{4}$ | 25.40 | 39.50 | 61.15 | 77.50 | 100.65 | 130.85 |
| $4\frac{1}{2}$ | 27.95 | 41.85 | 63.85 | 82.15 | 106.75 | 138.85 |
| $4\frac{3}{4}$ | ..... | 44.35 | 66.70 | 86.40 | 112.35 | 146.15 |
| 5 | ..... | ..... | 69.60 | 90.85 | 118.20 | 153.70 |

BRASS CAP SCREWS

HEXAGON HEAD—U. S. S.

THREADS

PER HUNDRED

| Length, Inches | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ |
|-------------------|---------------|----------------|---------------|---------------|---------------|
| $\frac{3}{4}$ | \$8.00 | \$9.00 | \$10.00 | \$12.60 | ..... |
| 1 | 8.10 | 9.40 | 10.50 | 13.20 | \$15.00 |
| $1\frac{1}{4}$ | 8.25 | 9.80 | 11.00 | 13.80 | 15.75 |
| $1\frac{1}{2}$ | 8.50 | 10.20 | 11.50 | 14.40 | 16.50 |
| $1\frac{3}{4}$ | 9.25 | 11.00 | 12.50 | 15.00 | 17.75 |
| 2 | 9.75 | 11.80 | 13.50 | 16.00 | 20.25 |

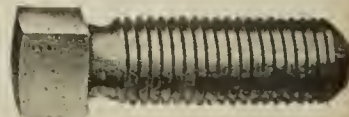
BRASS SET SCREWS

CUP POINT—U. S. S.

THREADS

PER HUNDRED

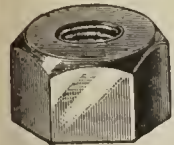
| Length, Inches | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{1}{2}$ | $\frac{5}{8}$ |
|-------------------|---------------|----------------|---------------|---------------|---------------|
| $\frac{3}{4}$ | \$9.00 | \$10.00 | \$12.50 | \$13.25 | \$13.75 |
| 1 | 10.00 | 11.00 | 13.75 | 14.50 | 15.00 |
| $1\frac{1}{4}$ | 11.00 | 12.00 | 15.00 | 15.75 | 16.25 |
| $1\frac{1}{2}$ | 12.00 | 13.00 | 16.25 | 17.00 | 17.50 |
| $1\frac{3}{4}$ | 13.00 | 14.00 | 17.50 | 18.25 | 18.75 |
| 2 | 14.00 | 15.00 | 18.75 | 19.50 | 20.00 |



EVERDUR HEXAGON NUTS

U.S.S. THREAD—PLAIN

Cut from Everdur bars, the non-rusting, corrosion-resisting, copper-silicon-manganese alloy.



| Bolt Diam., Inch | Threads per Inch | Width, Inch | Thickness, Inch | Per Hundred |
|------------------|------------------|-----------------|-----------------|-------------|
| $\frac{5}{16}$ | 18 | $\frac{9}{16}$ | $\frac{17}{64}$ | \$8.50 |
| $\frac{3}{8}$ | 16 | $\frac{5}{8}$ | $\frac{5}{16}$ | 11.80 |
| $\frac{1}{2}$ | 13 | $\frac{13}{16}$ | $\frac{7}{16}$ | 17.35 |
| $\frac{5}{8}$ | 11 | $\frac{15}{16}$ | $\frac{9}{16}$ | 28.35 |
| $\frac{3}{4}$ | 10 | $1\frac{1}{16}$ | $\frac{5}{8}$ | 48.50 |

EVERDUR FLAT WASHERS

CUT—BOLT SIZES

Non-rusting, corrosion-resisting copper-silicon-manganese alloy washers.

| For Bolt, Inch | Outside Diameter, Inch | Inside Diameter, Inch | Thickness, Inch | Per Thousand |
|----------------|------------------------|-----------------------|-----------------|--------------|
| $\frac{5}{16}$ | $\frac{3}{4}$ | $\frac{11}{32}$ | $\frac{1}{16}$ | \$27.85 |
| $\frac{3}{8}$ | $\frac{7}{8}$ | $\frac{13}{32}$ | $\frac{1}{16}$ | 33.25 |
| $\frac{1}{2}$ | $1\frac{3}{8}$ | $\frac{17}{32}$ | $\frac{5}{64}$ | 108.90 |
| $\frac{5}{8}$ | $1\frac{1}{2}$ | $\frac{21}{32}$ | $\frac{7}{64}$ | 160.85 |
| $\frac{3}{4}$ | $1\frac{3}{4}$ | $\frac{25}{32}$ | $\frac{7}{64}$ | 245.95 |

EVERDUR LOCK WASHERS

BOLT SIZES

Made from Everdur non-rusting, corrosion-resisting copper-silicon-manganese alloy. Have a strength approaching that of steel.

| For Bolt, Inch | Outside Diameter, Inches | Inside Diameter, Inch | Thickness, Inch | Per Thousand |
|----------------|--------------------------|-----------------------|-----------------|--------------|
| $\frac{5}{16}$ | $\frac{19}{32}$ | $\frac{11}{32}$ | $\frac{1}{16}$ | \$8.80 |
| $\frac{3}{8}$ | $\frac{21}{32}$ | $\frac{13}{32}$ | $\frac{3}{32}$ | 13.40 |
| $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{17}{32}$ | $\frac{1}{8}$ | 28.70 |
| $\frac{5}{8}$ | $1\frac{1}{16}$ | $\frac{21}{32}$ | $\frac{5}{32}$ | 60.10 |
| $\frac{3}{4}$ | $1\frac{5}{16}$ | $\frac{13}{16}$ | $\frac{3}{16}$ | 105.25 |

RIVETING BURRS

COPPER

Put up in one pound boxes.



| No. | Per Pound | Nos. | Per Pound | Nos. | Per Pound |
|--------|-----------|------|-----------|------|-----------|
| 4 to 7 | \$0.82 | 10 | \$0.90 | 13 | \$1.00 |
| 8 | .83 | 11 | .93 | 14 | 1.08 |
| 9 | .87 | 12 | .97 | 15 | 1.17 |

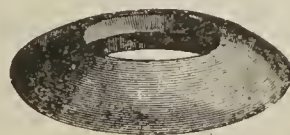
GALVANIZED IRON

| Size, Inch | Per Lb. | Size, Inch | Per Lb. |
|----------------|---------|----------------|---------|
| $\frac{3}{16}$ | \$0.50 | $\frac{5}{16}$ | \$0.46 |
| $\frac{1}{4}$ | .46 | $\frac{3}{8}$ | .46 |

CLINCH RINGS

GALVANIZED

Galvanized, malleable iron; countersunk hole; brass rings can be furnished to order.



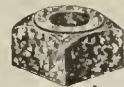
Sizes— $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$ Inch \$.....

Prices on Application

GALVANIZED IRON NUTS

SQUARE AND HEXAGON

TAPPED U. S. STANDARD THREADS



| Size, Inch | Threads, Inches | Number, 100 Lbs | Per Hundred | Size, Inch | Number, 100 Inches | Weight Lbs. | Per Hundred |
|----------------|-----------------|-----------------|-------------|---------------|--------------------|-------------|-------------|
| $\frac{1}{4}$ | 20 | 7,250 | \$2.00 | $\frac{1}{2}$ | 13 | 1,290 | \$4.00 |
| $\frac{5}{16}$ | 18 | 3,970 | 2.50 | $\frac{5}{8}$ | 11 | 695 | 5.00 |
| $\frac{3}{8}$ | 16 | 2,660 | 3.00 | $\frac{3}{4}$ | 10 | 435 | 6.00 |
| $\frac{7}{16}$ | 14 | 1,725 | 3.50 | .. | .. | .. | .... |

IRON MACHINE SCREW NUTS

HEXAGON

TAPPED—COLD PRESSED



| Nos. | Threads, Inch | Per Gross | Nos. | Threads, Inch | Per Gross |
|------|---------------|-----------|----------------|---------------|-----------|
| 2 | 56, 64 | \$0.50 | 10 | 24, 32 | \$0.43 |
| 3 | 48, 56 | .50 | 12 | 24, 28 | .55 |
| 4 | 40, 48 | .36 | $\frac{1}{4}$ | 20, 28 | .72 |
| 6 | 32, 40 | .36 | $\frac{5}{16}$ | 18, 24 | 1.22 |
| 8 | 32, 36 | .40 | $\frac{3}{8}$ | 16, 24 | 1.58 |

BRASS MACHINE SCREW NUTS

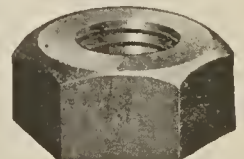
HEXAGON—TAPPED

SINGLE CHAMFERED—HEAVY PATTERN



| Nos. | Threads, Inch | Per Gross | Nos. | Threads, Inch | Per Gross |
|------|---------------|-----------|----------------|---------------|-----------|
| 2 | 56, 64 | \$1.51 | 10 | 24, 32 | \$1.73 |
| 3 | 48, 56 | 1.51 | 12 | 24, 28 | 2.16 |
| 4 | 40, 48 | 1.08 | $\frac{1}{4}$ | 20, 28 | 2.81 |
| 6 | 32, 40 | 1.08 | $\frac{5}{16}$ | 18, 24 | 6.05 |
| 8 | 32, 36 | 1.30 | $\frac{3}{8}$ | 16, 24 | 8.21 |

HEXAGON BRASS NUTS

PLAIN AND SEMI-FINISHED
TAPPED WITH U. S. STANDARD
THREADS

Semi-finished cut from the bar.

| Size, Inch | Threads, Inches | Per Hundred—Plain | Per Hundred—Semi-Finished | Size, Inches | Threads, Inch | Per Hundred—Plain | Per Hundred—Semi-Finished |
|----------------|-----------------|-------------------|---------------------------|----------------|---------------|-------------------|---------------------------|
| $\frac{3}{8}$ | 16 | \$3.75 | \$5.20 | $\frac{7}{8}$ | 9 | \$18.00 | \$45.00 |
| $\frac{7}{16}$ | 14 | 4.00 | 7.20 | 1 | 8 | 25.00 | 68.00 |
| $\frac{1}{2}$ | 13 | 5.00 | 9.60 | $1\frac{1}{8}$ | 7 | 37.50 | ..... |
| $\frac{5}{8}$ | 11 | 8.75 | 17.00 | $1\frac{1}{4}$ | 7 | 50.00 | ..... |
| $\frac{3}{4}$ | 10 | 12.00 | 27.00 | $1\frac{1}{2}$ | 6 | 75.00 | ..... |

CAST BRASS CAP NUTS

HEXAGON—TAPPED WITH U. S.
STANDARD THREADS

| Size, Inch | Threads, Inch | Per Hundred | Size, Inch | Threads, Inch | Per Hundred |
|----------------|---------------|-------------|---------------|---------------|-------------|
| $\frac{3}{16}$ | 32 | \$2.20 | $\frac{3}{8}$ | 16 | \$6.16 |
| $\frac{1}{4}$ | 20 | 3.52 | $\frac{1}{2}$ | 13 | 9.90 |
| $\frac{5}{16}$ | 18 | 4.40 | .. | .. | ..... |

BRASS WING NUTS

TAPPED U. S. STANDARD

| Size, Inch | Threads, Inch | Per Hundred |
|----------------|---------------|-------------|
| $\frac{3}{16}$ | 32 | \$3.96 |
| $\frac{1}{4}$ | 20 | 4.96 |
| $\frac{5}{16}$ | 18 | 8.26 |
| $\frac{3}{8}$ | 16 | 10.10 |
| $\frac{1}{2}$ | 13 | 27.50 |



WROUGHT STEEL WASHERS



No. 994
U. S. STANDARD SIZES
GALVANIZED

| For Bolts, Inch | Outside Diameter, Inches | Size Hole, Inches | Thickness, Gauge, Nos. | Thickness, Inch | Number in 100 Lbs. | Per Pound |
|-----------------|--------------------------|-------------------|------------------------|-----------------|--------------------|-----------|
| $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{4}$ | 18 | $\frac{3}{4}$ | 36200 | \$0.38 |
| $\frac{1}{4}$ | $\frac{3}{4}$ | $\frac{1}{8}$ | 16 | $\frac{1}{8}$ | 14900 | .33 |
| $\frac{1}{8}$ | $\frac{7}{8}$ | $\frac{3}{8}$ | 16 | $\frac{1}{8}$ | 11100 | .33 |
| $\frac{3}{8}$ | 1 | $\frac{1}{8}$ | 14 | $\frac{3}{4}$ | 6700 | .21 |
| $\frac{1}{8}$ | $1\frac{1}{4}$ | $\frac{1}{2}$ | 14 | $\frac{3}{4}$ | 4100 | .20 |
| $\frac{1}{2}$ | $1\frac{3}{8}$ | $\frac{1}{8}$ | 12 | $\frac{3}{4}$ | 2600 | .19 |
| $\frac{1}{8}$ | $1\frac{1}{2}$ | $\frac{5}{8}$ | 12 | $\frac{3}{4}$ | 2200 | .19 |
| $\frac{5}{8}$ | $1\frac{3}{4}$ | $\frac{1}{8}$ | 10 | $\frac{1}{8}$ | 1300 | .18 |
| $\frac{3}{4}$ | 2 | $\frac{1}{8}$ | 10 | $\frac{1}{8}$ | 1000 | .18 |
| $\frac{7}{8}$ | $2\frac{1}{4}$ | $\frac{1}{8}$ | 9 | $\frac{5}{32}$ | 728 | .18 |
| 1 | $2\frac{1}{2}$ | $1\frac{1}{8}$ | 9 | $\frac{5}{32}$ | 595 | .18 |

Two Hundred Pounds in a Keg

BRASS WASHERS

BOLT SIZES

Wrought brass; standard sizes.



| For Bolt, Inch | Outside Diameter, Inches | Approx. No. in a Pound | Per Dozen | For Bolt, Inch | Outside Diameter, Inches | Approx. No. in a Pound | Per Dozen |
|----------------|--------------------------|------------------------|-----------|----------------|--------------------------|------------------------|-----------|
| $\frac{1}{8}$ | $\frac{1}{2}$ | 480 | \$0.15 | $\frac{1}{2}$ | $1\frac{3}{8}$ | 29 | \$0.50 |
| $\frac{1}{4}$ | $\frac{1}{8}$ | 210 | .20 | $\frac{5}{8}$ | $1\frac{5}{8}$ | 21 | .75 |
| $\frac{1}{8}$ | $\frac{7}{8}$ | 103 | .25 | $\frac{3}{4}$ | 2 | 10 | .... |
| $\frac{3}{8}$ | 1 | 64 | .39 | $\frac{7}{8}$ | $2\frac{3}{8}$ | 6 | .... |
| $\frac{1}{8}$ | $1\frac{1}{8}$ | 45 | .43 | 1 | $2\frac{1}{2}$ | $5\frac{3}{4}$ | .... |

Note—Copper washers can be furnished to order.

Prices on Application

COUNTERSUNK WASHERS

STOP BEAD

Made of wrought brass, highly polished or nickel plated; are made to go under screw heads and are used for fine interior finishing and for attaching storm curtains.

| Nos. | Take Flat Head Screws, Nos. | Thickness, Inch | Diameter, Inch | Brass, per 1,000 | Nickel Plated, per 1,000 |
|------|-----------------------------|-----------------|----------------|------------------|--------------------------|
| 6 | 6 | $\frac{1}{16}$ | $\frac{7}{16}$ | \$5.25 | \$5.70 |
| 8 | 8 | $\frac{1}{16}$ | $\frac{1}{2}$ | 5.45 | 6.00 |
| 10 | 10 | $\frac{3}{32}$ | $\frac{5}{8}$ | 5.85 | 6.30 |
| 12 | 12 | $\frac{3}{32}$ | $\frac{3}{4}$ | 7.20 | 7.80 |
| 14 | 14 | $\frac{3}{32}$ | .. | 8.55 | 9.40 |

Price on Application

HATCH OR HINGE NAILS



GALVANIZED WIRE

| Length, Inches | Diameter Wire, Inch | Per Lb |
|---------------------|---------------------|---------|
| 3 to 3 | $\frac{1}{8}$ | \$..... |
| $2\frac{1}{2}$ to 4 | $\frac{1}{4}$ | ..... |
| 3 to 6 | $\frac{1}{8}$ | ..... |
| 2 to 6 | $\frac{3}{8}$ | ..... |

Prices on Application

GALVANIZED FINISHING NAILS

WAREHOUSE EXTRAS



| Size | Length, Inches | Gauge, Nos. | Approximate No. to Lb. | Extra Over Base, Per 100 Lbs. |
|------|----------------|-----------------|------------------------|-------------------------------|
| 2D | 1 | $16\frac{1}{2}$ | 1351 | \$2.75 |
| 3D | $1\frac{1}{4}$ | $15\frac{1}{2}$ | 807 | 2.10 |
| 4D | $1\frac{1}{2}$ | 15 | 584 | 1.60 |
| 5D | $1\frac{3}{4}$ | 15 | 500 | 1.60 |
| 6D | 2 | 13 | 309 | 1.00 |
| 7D | $2\frac{1}{4}$ | 13 | 238 | 1.00 |
| 8D | $2\frac{1}{2}$ | $12\frac{1}{2}$ | 189 | .75 |
| 9D | $2\frac{3}{4}$ | $12\frac{1}{2}$ | 172 | .75 |
| 10D | 3 | $11\frac{1}{2}$ | 121 | .65 |
| 12D | $3\frac{1}{4}$ | $11\frac{1}{2}$ | 113 | .65 |
| 16D | $3\frac{1}{2}$ | 11 | 90 | .65 |
| 20D | 4 | 10 | 62 | .65 |

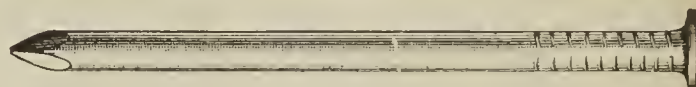
BRASS WIRE FINISHING NAILS

| Length, Inches | Gauge, Nos. | Approximate No. to Lb. | per Lb. |
|----------------|-------------|------------------------|---------|
| $\frac{3}{4}$ | 20 | 4,400 | ..... |
| 1 | 18 | 1,760 | ..... |
| $1\frac{1}{4}$ | 18 | 1,400 | ..... |
| $1\frac{1}{2}$ | 18 | 1,150 | ..... |
| $1\frac{1}{2}$ | 16 | 670 | ..... |
| $1\frac{3}{4}$ | 15 | 480 | ..... |
| 2 | 12 | 160 | ..... |
| $2\frac{1}{2}$ | 12 | 130 | ..... |
| 3 | 10 | 75 | ..... |

Price in Pound Packages and in Bulk Upon Application

GALVANIZED WIRE NAILS

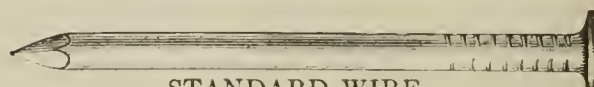
WAREHOUSE EXTRAS



COMMON

| Size | Length, Inches | Wire Nos. | Approximate Number to Lb. | Extra Over Base, per 100 Lbs. |
|------|----------------|-----------------|---------------------------|-------------------------------|
| 2d | 1 | 15 | 876 | \$2.00 |
| 3d | $1\frac{1}{4}$ | 14 | 568 | 1.30 |
| 4d | $1\frac{1}{2}$ | $12\frac{1}{2}$ | 316 | .90 |
| 5d | $1\frac{3}{4}$ | $12\frac{1}{2}$ | 271 | .90 |
| 6d | 2 | $11\frac{1}{2}$ | 181 | .65 |
| 7d | $2\frac{1}{4}$ | $11\frac{1}{2}$ | 161 | .65 |
| 8d | $2\frac{1}{2}$ | $10\frac{1}{4}$ | 106 | .50 |
| 9d | $2\frac{3}{4}$ | $10\frac{1}{4}$ | 96 | .50 |
| 10d | 3 | 9 | 69 | .40 |
| 12d | $3\frac{1}{4}$ | 9 | 63 | .40 |
| 16d | $3\frac{1}{2}$ | 8 | 49 | .40 |
| 20d | 4 | 6 | 31 | .25 |
| 30d | $4\frac{1}{2}$ | 5 | 24 | .25 |
| 40d | 5 | 4 | 18 | .25 |
| 60d | 6 | 2 | 11 | .25 |

COPPER NAILS



STANDARD WIRE

| Lgth., Ina. | Wire Gauge, Nos. | Approx. No. to Lb. | Extra Over Base, Per Lb. | Length, Inches | Wire Gauge, Nos. | Approx. No. to Lb. | Extra Over Base, Per Lb. |
|----------------|------------------|--------------------|--------------------------|----------------|------------------|--------------------|--------------------------|
| 1 | 15* | 765 | \$0.03 $\frac{1}{4}$ | 2 | 10 | 102 | Base |
| $1\frac{1}{4}$ | 11 | 196 | .02 $\frac{1}{2}$ | 2 | 12* | 170 | .02 $\frac{3}{4}$ |
| $1\frac{1}{4}$ | 14* | 522 | .01 $\frac{3}{4}$ | $2\frac{1}{2}$ | 8 | 51 | .02 |
| $1\frac{1}{2}$ | 8 | ... | .02 | $2\frac{1}{2}$ | 10* | 91 | Base |
| $1\frac{1}{2}$ | 11 | 165 | .02 $\frac{1}{4}$ | 3 | 8 | ... | .02 |
| $1\frac{1}{2}$ | 13* | 274 | .03 $\frac{1}{4}$ | 3 | 9* | 63 | Base |
| 2 | 8 | ... | .02 | $3\frac{1}{2}$ | 8* | 40 | Base |
| ... | ... | ... | ... | 4 | 6* | 26 | Base |

*Sizes are stock sizes for ordinary uses in five lb. boxes and 100 lb. kegs.

BOAT NAILS

GALVANIZED—ROUND HEAD



Blunt Point

Hot galvanized; heavily coated but free from lumps.

Advances Over Base per 100 Pounds

| Size, Inches | Extra | Size, Inches | Extra. |
|--------------|--------|--------------|--------|
| 4 | \$0.80 | 2 | \$1.10 |
| 3½ | .80 | 1½ | 1.25 |
| 3 | .90 | 1¼ | 1.35 |
| 2½ and 2¾ | 1.00 | 1 | 1.55 |
| 2¼ | 1.05 | ¾ | 2.00 |

Furnished in 100 Pound Kegs and 50 Pound Boxes

SHIP AND BOAT SPIKES



GALVANIZED

Furnished to order only. Lengths, 3 to 16 inches; sizes, ¼ to ¾ inch inclusive.

Prices on Application

COPPER TACKS



FLAT HEAD

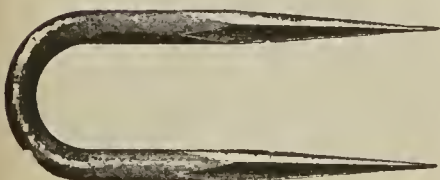
| Size, Ounces | Length, Inches | ¼ Pound Dozen Package | 1 Pound Each Package |
|--------------|----------------|-----------------------|----------------------|
| 3 | ¾ | \$2.40 | \$0.70 |
| 6 | 1½ | 2.40 | .70 |
| 10 | 5/8 | 2.40 | .70 |
| 14 | ¾ | 2.40 | .70 |
| 18 | ¾ | 2.40 | .70 |
| 22 | 1 | 2.40 | .70 |

¼ Pkgs. 1 Dozen in a Carton

GALVANIZED TACKS

| Size, Ounces | Length, Inches | 1 Pound Each Package |
|--------------|----------------|----------------------|
| 3 | ¾ | \$0.34 |
| 6 | 1½ | .32 |
| 10 | 5/8 | .30 |
| 14 | ¾ | .30 |
| 18 | ¾ | .30 |
| 22 | 1 | .30 |

WROUGHT STAPLES



Wrought iron; hot galvanized finish.

| Size, Inches | Per Gross | Size, Inches | Per Gross | Size, Inches | Per Gross |
|--------------|-----------|--------------|-----------|--------------|-----------|
| 1 | \$1.80 | 2 | \$3.00 | 4 | \$13.00 |
| 1¼ | 2.00 | 2½ | 4.00 | 4½ | 17.00 |
| 1½ | 2.25 | 3 | 6.00 | 5 | 23.00 |
| 1¾ | 2.50 | 3½ | 7.00 | ... | ..... |

ESCUTCHEON PINS

BRASS



Nos. 10 12 13 14 15 16 17 18 19

Manufacturers' Standard List

Per Pound—In 1 Pound Packages or in Bulk

| Wire Gauge, Nos. | ½ | ⅝ | ¾ | 1 | 1¼ | 1½ |
|------------------|--------|--------|--------|--------|--------|--------|
| 10 | .... | .... | .... | \$0.74 | \$0.72 | \$0.71 |
| 12 | .... | .... | .... | .83 | .79 | .77 |
| 14 | .... | .... | \$0.92 | .85 | .81 | .80 |
| 15 | .... | .... | .95 | .90 | .86 | .84 |
| 16 | \$1.10 | \$1.03 | .99 | .94 | .90 | .88 |
| 17 | 1.25 | 1.17 | 1.10 | 1.00 | .96 | .94 |
| 18 | 1.35 | 1.27 | .... | .... | .... | .... |

TAPER PINS



Best refined steel, perfectly machined; bright finish; taper, ¼ inch to the foot.

PER HUNDRED

| Length, Inches | 00 | 0 | 1 | 2 | 3 | 4 |
|----------------|--------|--------|--------|------|------|------|
| ½ | \$1.80 | \$1.80 | \$2.00 | 2.10 | 2.30 | 2.50 |
| ¾ | 1.80 | 1.80 | 2.00 | 2.10 | 2.30 | 2.50 |
| 1 | 2.05 | 2.05 | 2.25 | 2.35 | 2.55 | 2.75 |
| 1¼ | 2.30 | 2.30 | 2.50 | 2.60 | 2.80 | 3.00 |
| 1½ | 2.55 | 2.55 | 2.75 | 2.85 | 3.05 | 3.25 |
| 1¾ | 2.80 | 2.80 | 3.00 | 3.10 | 3.30 | 3.50 |
| 2 | 3.05 | 3.05 | 3.25 | 3.35 | 3.55 | 3.75 |
| 2½ | 3.55 | 3.55 | 3.75 | 3.85 | 4.05 | 4.25 |

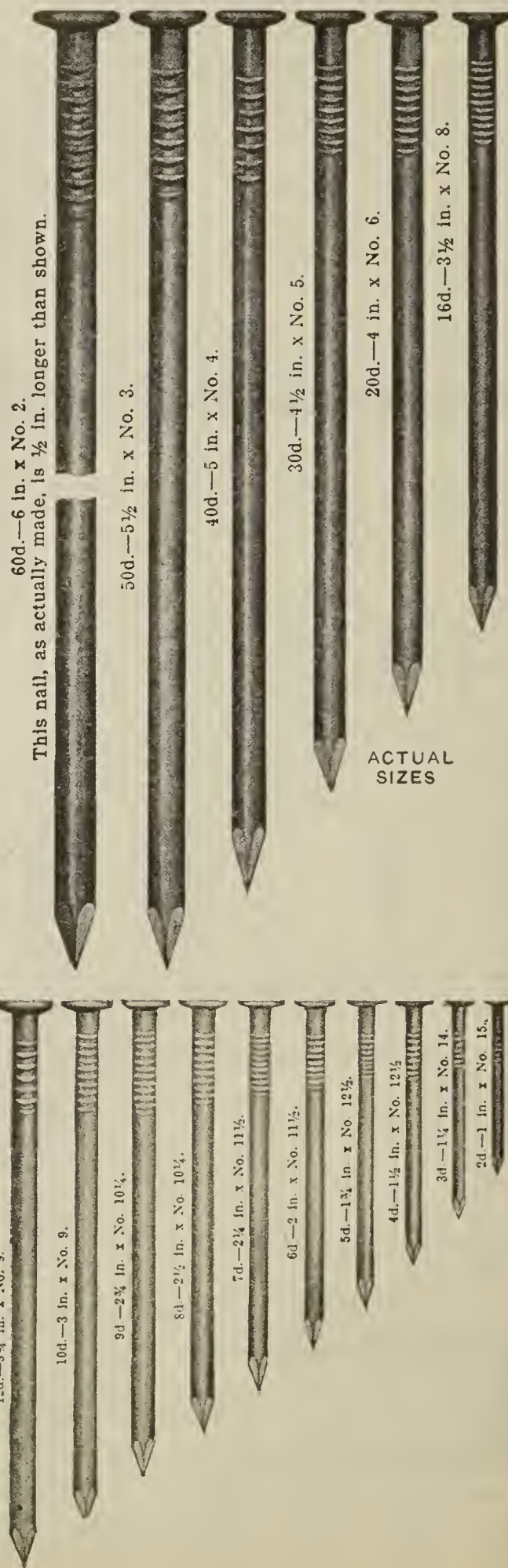
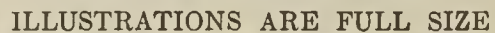
| Length, Inches | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------|--------|--------|--------|------|------|------|
| 1 | \$3.00 | \$3.25 | \$3.75 | 4.00 | 4.25 | 4.50 |
| 1¼ | 3.25 | 3.50 | 4.00 | 4.25 | 4.50 | 4.75 |
| 1½ | 3.50 | 3.75 | 4.25 | 4.50 | 4.75 | 5.00 |
| 1¾ | 3.75 | 4.00 | 4.50 | 4.75 | 5.00 | 5.25 |
| 2 | 4.05 | 4.35 | 4.75 | 5.00 | 5.25 | 5.50 |
| 2¼ | 4.40 | 4.75 | 5.25 | 5.50 | 5.75 | 6.00 |
| 2½ | 4.75 | 5.20 | 5.75 | 6.00 | 6.25 | 6.50 |
| 3 | 5.45 | 6.25 | 6.75 | 7.00 | 7.25 | 7.50 |
| 3½ | 6.15 | 7.25 | 7.75 | 8.00 | 8.25 | 8.50 |
| 4 | 6.85 | 8.25 | 8.75 | 9.00 | 9.25 | 9.50 |

SPECIFICATIONS

| Nos. | Diam. Large End, Inch | Fractional Sizes, Inch | Nos. | Diam. Large End, Inch | Fractional Sizes, Inch |
|------|-----------------------|------------------------|------|-----------------------|------------------------|
| 00 | .141 | ¼ | 5 | .289 | 19/64 |
| 0 | .156 | 5/32 | 6 | .341 | 11/32 |
| 1 | .172 | 11/64 | 7 | .409 | 13/32 |
| 2 | .193 | ¼ | 8 | .492 | 1½ |
| 3 | .219 | 1/8 | 9 | .591 | 19/16 |
| 4 | .250 | ¼ | 10 | .706 | 23/32 |

TIEBOUT Service means the rallying of all our force to the ultimate use of our customers. This organization consists of men and women of high calibre, compatible in every way with the class of service our customers have a right to demand—to be served promptly, fairly and efficiently.

GALVANIZED—REGULAR STYLE HEAD
CUTS FULL SIZE



BRASS PIPE FITTINGS



Tee



Ell



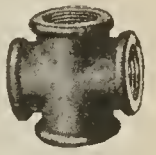
45° Ell



Street Ell



Union



Cross



Lock Nut



Close Nipple



Shoulder Nipple



Reducer



Coupling



Plug



Bushing

MALLEABLE IRON PATTERN—IRON PIPE SIZES
ROUGH

| Size, Inches | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1 | Each 1 1/4 | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 |
|---------------------|--------|--------|--------|--------|--------|--------|---------------|--------|--------|--------|--------|--------|---------|
| Elbows, 90° | \$0.12 | \$0.15 | \$0.20 | \$0.28 | \$0.40 | \$0.63 | \$0.90 | \$1.20 | \$2.00 | \$3.50 | \$6.00 | \$8.00 | \$10.00 |
| Elbows, Reducing | .19 | .25 | .25 | .35 | .50 | .80 | 1.10 | 1.50 | 2.50 | 4.25 | 7.50 | 10.00 | 12.50 |
| Elbows, 45° | .16 | .20 | .25 | .31 | .40 | .63 | .85 | 1.50 | 2.00 | 3.50 | 6.00 | ..... | ..... |
| Elbows, Street | .25 | .27 | .33 | .48 | .63 | .85 | 1.50 | 2.00 | 3.25 | ..... | ..... | ..... | ..... |
| Tees | .17 | .21 | .28 | .40 | .55 | .85 | 1.25 | 1.70 | 2.80 | 5.00 | 6.50 | 11.00 | 14.00 |
| Tees, Reducing | ... | .25 | .35 | .50 | .70 | 1.05 | 1.80 | 2.10 | 3.50 | 6.25 | 10.30 | 14.00 | 17.50 |
| Crosses | .25 | .30 | .40 | .55 | .80 | 1.25 | 1.80 | 2.00 | 4.00 | 7.00 | 12.00 | 16.00 | 20.00 |
| Crosses, Reducing | ... | .38 | .50 | .70 | 1.00 | 1.55 | 2.25 | 3.00 | 5.00 | 8.75 | 15.00 | 20.00 | 25.00 |
| Couplings | .10 | .13 | .17 | .25 | .37 | .55 | .80 | 1.00 | 1.60 | 2.50 | 3.50 | 5.25 | 7.00 |
| Couplings, R & L | .13 | .17 | .22 | .30 | .45 | .70 | 1.00 | 1.30 | 2.00 | 3.10 | 4.50 | ..... | ..... |
| Couplings, Reducing | ... | .15 | .20 | .28 | .40 | .60 | .90 | 1.10 | 1.75 | 2.75 | 4.00 | 6.00 | 8.00 |
| Bushings | ... | .10 | .12 | .15 | .22 | .35 | .50 | .70 | 1.00 | 1.50 | 2.50 | 3.75 | 5.00 |
| Return Bends, Open | ... | ... | ... | .80 | 1.10 | 1.40 | 2.15 | 3.00 | 4.35 | 8.25 | 11.00 | ..... | ..... |
| Return Bends, Close | ... | ... | ... | .70 | 1.00 | 1.25 | 1.80 | 2.50 | 4.25 | ..... | ..... | ..... | ..... |
| E. Y. Bends | ... | ... | .60 | .75 | 1.10 | 1.65 | 2.50 | 3.30 | 5.50 | 9.50 | 16.00 | 21.00 | 26.00 |
| Reducers | ... | .15 | .20 | .28 | .40 | .60 | .90 | 1.10 | 1.35 | 2.75 | 4.00 | 6.00 | 8.00 |
| Caps | .10 | .13 | .16 | .20 | .30 | .42 | .60 | .80 | 1.25 | 2.50 | 3.50 | 5.50 | 7.00 |
| Plugs | .08 | .10 | .12 | .15 | .20 | .30 | .45 | .60 | .95 | 1.50 | 2.25 | 3.75 | 5.00 |
| Locknuts | .10 | .10 | .12 | .15 | .20 | .28 | .40 | .55 | .80 | 1.25 | 2.75 | 4.00 | 5.00 |
| Unions | .40 | .50 | .65 | .85 | 1.15 | 1.60 | 2.25 | 2.70 | 4.00 | 7.50 | 11.50 | ..... | ..... |
| Reducers | ... | .15 | .20 | .28 | .40 | .60 | .90 | 1.10 | 1.75 | 2.75 | 4.20 | 6.00 | 8.00 |

BRASS NIPPLES
IRON PIPE SIZES—RIGHT HAND

| Iron Pipe Size, Inches | Length Close, Inches | Price, Each—Length, Inches | | | | | | | | | | |
|---------------------------------|----------------------------|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Close | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 |
| 1/8 | 3/4 | \$0.11 | \$0.13 | \$0.15 | \$0.17 | \$0.19 | \$0.21 | \$0.23 | \$0.25 | \$0.27 | \$0.29 | \$0.31 |
| 1/4 | 7/8 | .13 | .16 | .19 | .22 | .25 | .28 | .31 | .34 | .37 | .40 | .43 |
| 3/8 | 1 | .15 | .19 | .23 | .27 | .31 | .35 | .39 | .43 | .47 | .51 | .55 |
| 1/2 | 1 1/8 | .23 | .25 | .30 | .35 | .40 | .45 | .50 | .55 | .60 | .65 | .70 |
| 3/4 | 1 3/8 | .28 | ..... | .35 | .42 | .49 | .56 | .63 | .70 | .77 | .84 | .91 |
| 1 | 1 1/2 | .37 | ..... | .44 | .53 | .62 | .71 | .80 | .89 | .98 | 1.07 | 1.16 |
| 1 1/4 | 1 5/8 | .60 | ..... | ..... | .75 | .88 | 1.01 | 1.14 | 1.27 | 1.40 | 1.53 | 1.66 |
| 1 1/2 | 1 3/4 | .70 | ..... | ..... | .90 | 1.05 | 1.20 | 1.35 | 1.50 | 1.65 | 1.80 | 1.95 |
| | 2 | 1.00 | ..... | ..... | 1.20 | 1.40 | 1.60 | 1.80 | 2.00 | 2.20 | 2.40 | 2.60 |

FILLER CAPS AND FLANGES

ROUND

Designed for motor boat gasoline tank, oil tanks, etc.; made of cast brass, thoroughly machined and highly polished; cap has wings for screwing or unscrewing; sharp, clean cut threads; flange has four holes around edge for riveting to tank; complete with flange and cap.

Each

No. 63J—Out-

side Diameter of Flange, 3 1/4 Inches; Diameter of Opening, 1 5/8 Inches; Weight Each, 10 1/2 Ounces.....\$1.25

OVAL

For use with round tanks.

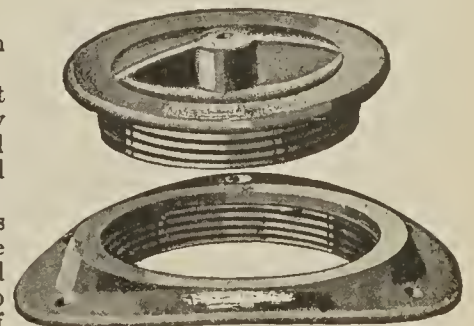
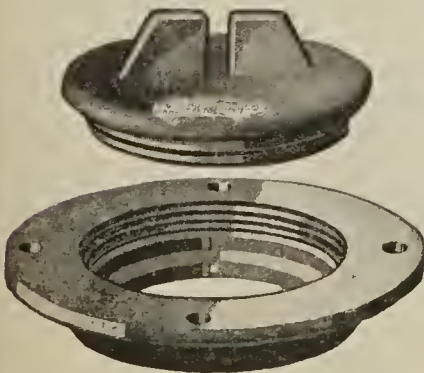
Made of cast brass, thoroughly machined and brightly finished round edges.

Cap has wings with vent; flange has six holes around edge for riveting to tank; bottom of flange is curved to a radius of 6 inches; complete with flange and cap.

Each

No. 66J—Outside Diameter of Flange, 2 1/2 Inches;

Diameter of Opening, 2 Inches; Weight Each, 8 Ounces.....\$1.25



SEAMLESS BRASS PIPE



Regular temper seamless brass pipe; plain ends. Furnished in 12 foot lengths.

IRON PIPE SIZES

| Iron Pipe Size, Inches | Actual Outside Diameter, Inches | Actual Inside Diameter, Inches | Weight per Foot, Lbs. | Add Net to Base Price, per Pound |
|------------------------|---------------------------------|--------------------------------|-----------------------|----------------------------------|
| 1/8 | .405 | .218 | .246 | \$0.10 |
| 1/4 | .540 | .375 | .437 | .07 |
| 3/8 | .675 | .494 | .612 | .04 |
| 1/2 | .840 | .625 | .911 | .02 |
| 3/4 | 1.050 | .822 | 1.235 | Base |
| 1 | 1.315 | 1.062 | 1.740 | Base |
| 1 1/4 | 1.660 | 1.368 | 2.557 | Base |
| 1 1/2 | 1.900 | 1.600 | 3.037 | Base |
| 2 | 2.375 | 2.062 | 4.017 | Base |
| 2 1/2 | 2.875 | 2.500 | 5.830 | Base |
| 3 | 3.500 | 3.062 | 8.314 | Base |

FLAT BRASS



In 8 and 10 foot lengths.

| Size, Inch | Weight per Foot, Lbs. | Per Pound | Size, Inches | Weight per Foot, Lbs. | Per Pound |
|-------------|-----------------------|-----------|--------------|-----------------------|-----------|
| 1 x 1/8 | .229 | \$..... | 1 1/4 x 1/8 | .570 | \$..... |
| 1 x 1/4 | .456 | ..... | 1 1/4 x 1/4 | .859 | ..... |
| 1 x 3/8 | .687 | ..... | 1 1/2 x 1/8 | .684 | ..... |
| 1 1/4 x 1/8 | .276 | ..... | 1 1/2 x 1/4 | 1.030 | ..... |

SHEET BRASS

In sheets 14x72 inches.

| Thickness, Inch | Weight per Square Foot, Lbs. | Per Pound |
|-----------------|------------------------------|-----------|
| 1/8 | .692 | \$..... |
| 1/4 | 1.384 | ..... |
| 3/8 | 2.768 | ..... |
| 1/2 | 5.535 | ..... |

SHEET COPPER

Hot rolled, plain soft copper. In sheets 30x60 inches.

| Wgt. per Sheet, Lbs. | Thickness, Inch | Approx. B. & S. Gauge | Per Pound | Wgt. per Sheet, Lbs. | Thickness, Inch | Approx. B. & S. Gauge | Per Pound |
|----------------------|-----------------|-----------------------|-----------|----------------------|-----------------|-----------------------|-----------|
| 9 | .016 | 26 | \$..... | 20 | .0324 | 20 | \$..... |
| 10 | .0189 | 25 | ..... | 25 | .0432 | 17 | ..... |
| 11 | .0201 | 24 | ..... | 30 | .0486 | 16 | ..... |
| 12 1/2 | .0216 | 23 | ..... | 35 | .0594 | 15 | ..... |
| 15 | .0243 | 22 | ..... | 40 | .0648 | 14 | ..... |
| 16 | .0270 | 21 | ..... | 75 | .1296 | 8 | ..... |
| 18 | .0270 | 21 | ..... | .. | ..... | .. | ..... |

In sheets, 36x72 inches.

| Thickness, Inch | Weight per Square Foot, Lbs. | Per Pound | Thickness, Inch | Weight per Square Foot, Lbs. | Per Pound |
|-----------------|------------------------------|-----------|-----------------|------------------------------|-----------|
| 1/8 | 1 1/2 | \$..... | 1/8 | 6 | \$..... |
| 1/4 | 3 | ..... | .. | .. | ..... |

FOR SHEATHING

In sheets, 14x48 inches.

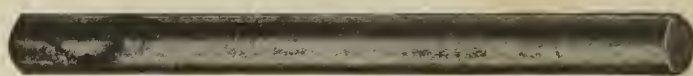
| Weight per Square Foot, Ounces | Weight per Sheet, Lbs. | Per Pound |
|--------------------------------|------------------------|-----------|
| 12 | 3.50 | \$..... |
| 14 | 4.08 | ..... |
| 16 | 4.66 | ..... |
| 18 | 5.25 | ..... |

All Above, Prices on Application

Note—Approximate weight of sheet copper per square foot when thickness is given in fractional parts of an inch.

| Thickness, Inch | 1/8 | 1/4 | 1/2 | 1 |
|------------------------------|-----|-----|-----|----|
| Weight per Square Foot, Lbs. | 3 | 6 | 12 | 24 |

BRASS ROD



Round

Free cutting. Furnished in 10 to 12 foot lengths.

| Size, Inch | Weight per Foot, Lbs. | Per Pound | Size, Inches | Weight per Foot, Lbs. | Per Pound |
|------------|-----------------------|-----------|--------------|-----------------------|-----------|
| 3/16 | .1019 | \$..... | 1 1/8 | .5546 | \$..... |
| 1/4 | .1811 | ..... | 1 1/2 | .7243 | ..... |
| 5/16 | .2829 | ..... | 5/8 | 1.132 | ..... |
| 3/8 | .4074 | ..... | 3/4 | 1.630 | ..... |

Half Round

| Size, Inch | Weight per Foot, Lbs. | Per Pound | Size, Inches | Weight per Foot, Lbs. | Per Pound |
|------------|-----------------------|-----------|--------------|-----------------------|-----------|
| 3/8 | .2037 | \$..... | 7/8 | 1.109 | \$..... |
| 1/2 | .3622 | ..... | 1 | 1.449 | ..... |
| 5/8 | .566 | ..... | 1 1/4 | 2.264 | ..... |
| 3/4 | .82 | ..... | .. | 3.259 | ..... |

Half Oval

| Size, Inch | Weight per Foot, Lbs. | Per Pound | Size, Inches | Weight per Foot, Lbs. | Per Pound |
|------------|-----------------------|-----------|--------------|-----------------------|-----------|
| 3/8 x 3/8 | 1.104 | \$..... | 3/4 x 1/4 | .508 | \$..... |
| 1/2 x 1/8 | .167 | ..... | 1/2 x 1/4 | .584 | ..... |
| 5/8 x 3/8 | .312 | ..... | 1 x 1/4 | .650 | ..... |

FLAT HATCH TRIM

BRASS AND NICKEL SILVER

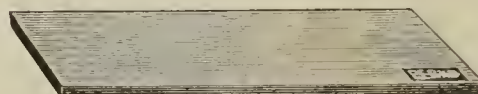


Fig. No. 243

For neat finishing around edge of hatch. Made of 18 B & S gauge metal in standard lengths.

| Width, Inches | Weight per Foot, Ounces | Polished Brass | Nickel Silver |
|---------------|-------------------------|----------------|---------------|
| 1 1/4 | 3 | \$0.22 | \$0.36 |

HOT GALVANIZED IRON BARS

Stock Lengths

| Round | | | Half Round | | | Half Oval | | |
|------------|-----------------------|-----------|------------|-----------------------|-----------|--------------|-----------------------|-----------|
| Size, Inch | Weight per Foot, Lbs. | Per Pound | Size, Ins. | Weight per Foot, Lbs. | Per Pound | Size, Inches | Weight per Foot, Lbs. | Per Pound |
| 1/4 | .175 | \$..... | 1/2 | .334 | \$..... | 1 x 3/8 | .500 | \$..... |
| 5/16 | .261 | ..... | 5/8 | .522 | ..... | 1 x 1/4 | .662 | ..... |
| 3/8 | .394 | ..... | 3/4 | .750 | ..... | 1 1/8 x 1/8 | .920 | ..... |
| 1/2 | .651 | ..... | 1 | 1.355 | ..... | 1 1/4 x 3/8 | 1.250 | ..... |
| 5/8 | .701 | ..... | 1 1/4 | 2.087 | ..... | 1 1/2 x 3/8 | 1.500 | ..... |
| 3/4 | 1.095 | ..... | 1 1/2 | 3. | ..... | ..... | ..... | ..... |
| 1 | 1.577 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1 1/4 | 2.803 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

Prices on Application

SEAMLESS COPPER TUBING

ANNEALED



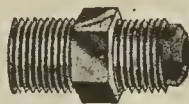
Drawn from pure high grade copper; thoroughly annealed; can be bent without breaking. Especially suitable for air, gasoline or oil lines in conjunction with solderless fittings. Furnished in 12 and 25 foot lengths.

| Outside Diameter, Inch | Wall Thickness, Stubbs Gauge | Approx. No. of Feet in a Pound | Weight per Hundred Feet, Lbs. | Per Foot |
|------------------------|------------------------------|--------------------------------|-------------------------------|----------|
| 3/8 | 20 | 16 | .6 | \$0.06 |
| 1/4 | 20 | 12 | 8.4 | .09 |
| 3/8 | 20 | 9 | 10.9 | .13 |
| 1/2 | 20 | 7 1/2 | 13.2 | .15 |
| 3/4 | 20 | 5 1/2 | 17.8 | .18 |

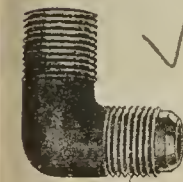
FLARED TUBE FITTINGS



46F Female
COUPLINGS



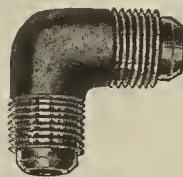
No. 48F
HALF UNIONS



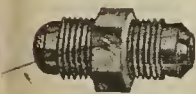
No. 49F



No. 50F
ELBOWS



No. 55F



No. 42F
UNIONS



No. 41F
UNION NUTS



No. 43F
BALL CHECK
VALVES



No. 44F
TEES—3 WAY



No. 45F
TEES—3 WAY

| O.D. Tube I.P.T. | Per 100 | | | | |
|---------------------|---------|---------|---------|---------|---------|
| | 1/4 | 5/16 | 3/8 | 1/2 | 5/8 |
| 41-F | \$11.60 | \$15.00 | \$23.00 | \$42.00 | \$67.00 |
| 42-F | 17.20 | 21.00 | 31.80 | 50.00 | 83.60 |
| 43-F | 27.80 | 31.80 | 43.40 | 62.00 | ..... |
| 44-F | 23.80 | 30.20 | 46.80 | 72.00 | 214.00 |
| 45-F | 23.00 | 29.40 | 39.00 | 80.00 | 205.40 |
| 46-F | 15.60 | 17.80 | 29.40 | 47.40 | 102.00 |
| 48-F | 12.00 | 15.80 | 26.40 | 41.20 | 182.00 |
| 49-F | 16.80 | 19.20 | 30.40 | 49.80 | 116.00 |
| 50-F | 22.40 | 25.60 | 55.40 | 104.60 | 156.00 |
| 55-F | 21.40 | 23.00 | 33.40 | 50.00 | 123.00 |

SOLDERLESS COMPRESSION
COUPLINGS



No. 65F



No. 69F
ELBOWS



No. 70F



No. 62F
UNIONS



No. 68F
CONNECTORS



No. 66F
COUPLINGS



No. 72F



No. 64F
TEES



No. 71F



No. 61F
NUTS



No. 60F
SLEEVES

| O.D. Tube I.P.T. | Per 100 | | | | |
|---------------------|---------|--------|--------|--------|---------|
| | 1/4 | 5/16 | 3/8 | 1/2 | 5/8 |
| 60-F | \$2.00 | \$2.20 | \$3.00 | \$9.40 | \$13.00 |
| 61-F | 5.40 | 7.00 | 9.00 | 19.00 | 28.00 |
| 62-F | 23.00 | 28.80 | 35.00 | 86.00 | 132.00 |
| 64-F | 39.80 | 44.00 | 59.80 | 136.00 | 228.00 |
| 65-F | 33.00 | 34.20 | 43.60 | 96.00 | 173.00 |
| 66-F | 17.80 | 20.40 | 25.60 | 78.00 | ..... |
| 68-F | 15.00 | 18.00 | 25.80 | 66.00 | 85.00 |
| 69-F | 20.00 | 24.00 | 31.80 | 82.60 | 115.00 |
| 70-F | 25.00 | 25.80 | 36.40 | 92.00 | ..... |
| 71-F | 36.00 | 40.00 | 52.00 | 144.00 | 188.00 |
| 72-F | 36.00 | 40.00 | 52.00 | 144.00 | 191.00 |



PRIMING CUPS

STRAIGHT SHANK
ROUND LEVER HANDLE

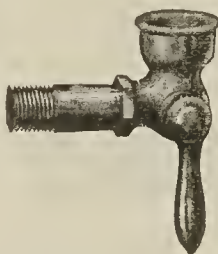
Made from high grade brass, carefully machined and highly polished; spring key automatically takes up wear and holds handle in any position; straight shank; male thread; hexagonal shoulder.

| No. | Pipe Thread, Inch | Bowl Diam., Inch | Length Over- all, Inches | Weight per Dozen, Lbs | Each |
|-----|----------------------|---------------------|-----------------------------|--------------------------|--------|
| 0 | 1/8 | 3/4 | 2 3/16 | 1 3/4 | \$0.26 |
| 1 | 1/4 | 3/4 | 2 1/4 | 2 | .30 |

ELBOW SHANK
ROUND LEVER HANDLE

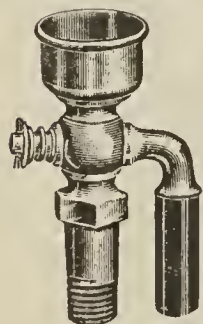
Made from high grade brass, carefully machined and highly polished; elbow shank; male thread; hexagonal shoulder.

| No. | Pipe Thread, Inch | Bowl Diam., Inch | Length Over- all, Inches | Weight per Dozen, Lbs. | Each |
|-----|----------------------|---------------------|-----------------------------|---------------------------|--------|
| 0 | 1/8 | 3/4 | 1 7/8 | 1 1/4 | \$0.37 |
| 2 | 1/4 | 7/8 | 2 1/8 | 2 | .40 |
| 3 | 1/4 | 1 1/8 | 2 1/16 | 3 1/4 | ..... |



LARGE BOWL PRIMING CUP

WITH FIBRE HANDLE



| Pipe Thread | Bowl, Inches | Each |
|-------------|--------------|--------|
| F0-1/8 | 1 | \$0.80 |
| F2-1/4 | 1 1/16 | .84 |

Elbow Same as Above

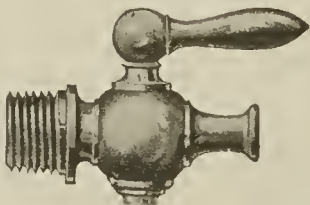
| Pipe Thread | Bowl, Inches | Each |
|-------------|--------------|--------|
| 0F-1/8 | 1 | \$0.76 |
| F-1 | 1 1/16 | .78 |

DRAIN COCKS

STRAIGHT NOSE
MALE ENDS

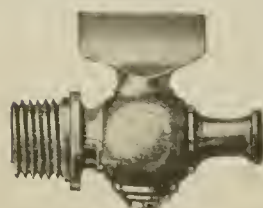
No. 12C—Lever Handle

| Size, Inch | Weight per Dozen, Lbs. | Each |
|---------------|---------------------------|--------|
| 1/8 | 1 3/4 | \$0.55 |
| 1/4 | 1 3/4 | .60 |
| 3/8 | ... | .65 |
| 1/2 | ... | .75 |



WITH SPRING KEYS

Properly designed and well finished. Polished brass; with ground spring key.

STRAIGHT NOSE
MALE ENDS
No. 6C—Tee Handle

| Size, Inch | Weight per Dozen, Lbs | Each |
|---------------|--------------------------|--------|
| 1/8 | 1 1/4 | \$0.40 |
| 1/4 | 1 3/4 | .45 |
| 3/8 | ... | .50 |
| 1/2 | ... | .60 |

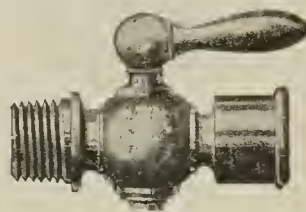
AIR COCKS

WITH SPRING KEYS

Properly designed and well finished. Polished brass; with ground, spring keys.

MALE AND FEMALE

No. 46C—Lever Handle

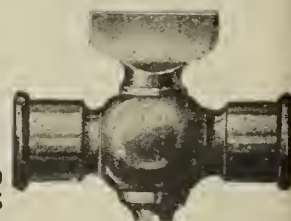


| Size, Inch | Weight per Dozen, Lbs. | Each |
|---------------|---------------------------|--------|
| 1/8 | 1 3/4 | \$0.90 |
| 1/4 | 2 | .95 |
| 3/8 | 3 | 1.05 |
| 1/2 | ... | ... |

FEMALE—BOTH ENDS

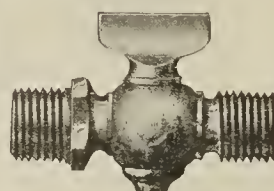
No. 37C—Tee Handle

| Size, Inch | Weight per Dozen, Lbs. | Each |
|---------------|---------------------------|--------|
| 1/8 | 1 3/4 | \$0.65 |
| 1/4 | 2 | .70 |
| 3/8 | 3 | .85 |



MALE—BOTH ENDS

No. 18C—Tee Handle



| Size, Inch | Weight per Dozen, Lbs. | Each |
|---------------|---------------------------|--------|
| 1/8 | 1 3/4 | \$0.55 |
| 1/4 | 2 | .65 |
| 3/8 | 2 3/4 | .75 |
| 1/2 | ... | .90 |

BIBB NOSE COCKS

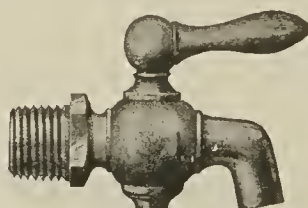
BIBB NOSE—TEE HANDLE

With male ends; and hexagon shoulder; polished brass; with ground spring key.

| Size, Inch | Weight per Dozen, Lbs. | Each |
|---------------|---------------------------|--------|
| 1/8 | 1 3/4 | \$0.70 |
| 1/4 | 1 3/4 | .80 |
| 3/8 | 2 1/2 | .90 |
| 1/2 | 3 | 1.00 |



BIBB NOSE—LEVER HANDLE



| Size, Inch | Weight per Dozen, Lbs. | Each |
|---------------|---------------------------|--------|
| 1/8 | 1 3/4 | \$0.85 |
| 1/4 | 2 | .95 |
| 3/8 | 2 3/4 | 1.05 |

All Above, Twelve in a Box

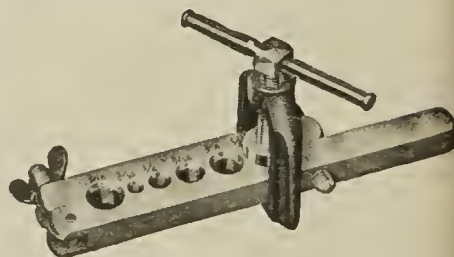
TUBING FLARING TOOLS

IMPERIAL

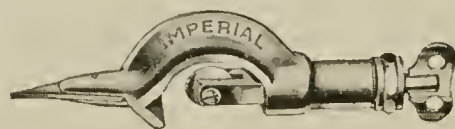
For flaring copper tubing wherever S.A.E. couplings are used; also for thin sizes of brass tubing.

Has six openings for flaring and tapering tubing of 1/8, 1/4, 5/8, 3/8, 7/8 and 1/2 inch outside diameter. No vise necessary. Does not crack or split tubes. Case hardened and cadmium plated.

No. 93F—Length, 7 Inches; Weight Each, 1 3/4 Lbs. \$4.50



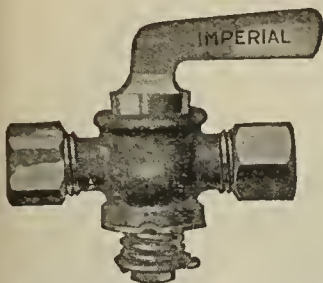
TUBE CUTTER



Will cut tubing from 1/8 inch to 5/8 inch, with a right-angle cut, quickly and cleanly, leaving no burrs or chips to clog the line. The cutting wheel as it cuts, turns down small amount of metal on the end, providing extra strength for flaring.

No. 94F—Tube Cutter\$3.75

SHUT-OFF COCKS

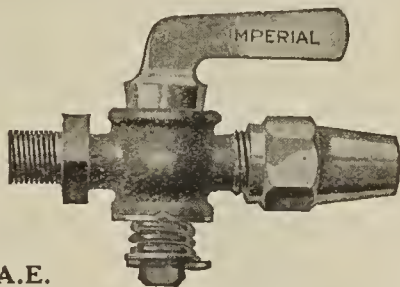


Each plug is individually ground into the body to a perfect seat and is held tight by a coiled spring at the bottom. A notched washer locks the plug in open and shut positions.

Nos. 28-EF to 58-EF

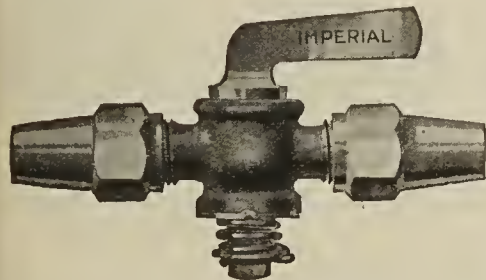
| | |
|---|-----------|
| No. 28-EF—Cock, $\frac{1}{4}$ " O. D. Tubing..... | Each 1.20 |
| No. 30-EF—Cock, $\frac{5}{8}$ " O. D. Tubing..... | 1.28 |
| No. 58-EF—Cock, $\frac{3}{8}$ " O. D. Tubing..... | 1.56 |

Each plug is individually ground into the body to a perfect seat and is held tight by a coiled spring at the bottom. A notched washer locks the plug in both open and shut positions.



Nos. 27-S.A.E. to 57-S.A.E.

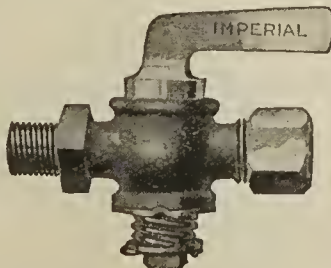
| | |
|---|-------------|
| No. 27-S.A.E. — Cock, $\frac{1}{4}$ " O. D. Tubing x $\frac{1}{8}$ " I. P. T., without Nuts, Net Weight, per 100, 22 Lbs. | Each \$1.08 |
| No. 227-S.A.E. — Cock, $\frac{1}{4}$ " O. D. Tubing x $\frac{1}{4}$ " I. P. T., without Nuts, Net Weight, per 100, 22 $\frac{1}{2}$ Lbs. | 1.20 |
| No. 29-S.A.E. — Cock, $\frac{5}{8}$ " O. D. Tubing x $\frac{1}{8}$ " I. P. T., without Nuts, Net Weight, per 100, 22 $\frac{1}{2}$ Lbs. | 1.12 |
| No. 229-S.A.E.—Cock, $\frac{5}{8}$ " O. D. Tubing x $\frac{1}{4}$ " I. P. T., without Nuts, Net Weight, per 100, 23 lbs | 1.24 |
| No. 57-S.A.E. — Cock, $\frac{3}{8}$ " O. D. Tubing x $\frac{1}{4}$ " I. P. T., without Nuts, Net Weight, per 100, 27 $\frac{1}{2}$ Lbs. | \$1.36 |



Nos. 28-S.A.E. to 58-S.A.E.

| | |
|---|-----------|
| No. 28-S.A.E. — Cock, $\frac{1}{4}$ " O. D. Tubing, without Nuts, Net Weight per 100, 21 Lbs. | Each 1.12 |
| No. 30-S.A.E.—Cock $\frac{5}{8}$ " O. D. Tubing, without Nuts, Net Weight per 100, 22 $\frac{1}{2}$ Lbs..... | 1.16 |
| No. 58-S.A.E.—Cock, $\frac{3}{8}$ " O. D. Tubing, without Nuts, Net Weight, per 100, 27 $\frac{1}{2}$ Lbs. | 1.36 |

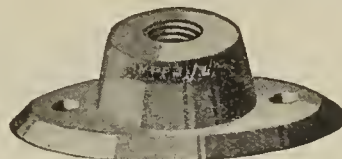
Each plug is individually ground into the body to a perfect seat and is held tight by a coiled spring at the bottom. A notched washer locks the plug in both open and shut positions.



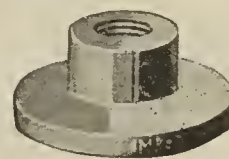
Nos. 27-EF to 57-EF

| | |
|---|-------------|
| No. 27-EF—Cock, $\frac{1}{4}$ " O. D. Tubing x $\frac{1}{8}$ " I. P. T.... | Each \$1.16 |
| No. 227-EF—Cock, $\frac{1}{4}$ " O. D. Tubing x $\frac{1}{4}$ " I. P. T. | 1.28 |
| No. 29-EF—Cock, $\frac{5}{8}$ " O. D. Tubing x $\frac{1}{8}$ " I. P. T. | 1.20 |
| No. 229-EF—Cock, $\frac{5}{8}$ " O. D. Tubing x $\frac{1}{4}$ " I. P. T. | 1.28 |
| No. 57-EF—Cock, $\frac{3}{8}$ " O. D. Tubing by $\frac{1}{4}$ " I. P. T.... | \$1.32 |

TANK FLANGES



No. 70J



No. 71J

Made of cast bass, machined and brightly finished; drilled and tapped with iron pipe thread; used for connecting pipes or tubing to gasoline or oil tanks; No. 70J has two holes for bolt or rivet fastening; No. 71J is blank.

No. 70J—Beveled Edge

| Size Pipe Thread, Inch | Diam. Flange, Inches | Height Overall, Inches | Weight per 100, Lbs | Each |
|------------------------|----------------------|------------------------|---------------------|--------|
| $\frac{1}{8}$ | $1\frac{3}{4}$ | $1\frac{1}{2}$ | $6\frac{1}{4}$ | \$0.25 |

No. 71J—Square Edge

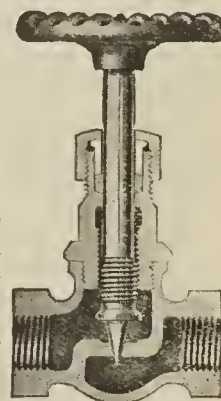
| Size Pipe Thread, Inch | Diam. Flange, Inches | Height Overall, Inches | Weight per 100, Lbs | Each |
|------------------------|----------------------|------------------------|---------------------|--------|
| $\frac{1}{4}$ | $1\frac{1}{2}$ | $1\frac{3}{4}$ | 9 | \$0.30 |
| $\frac{3}{8}$ | $1\frac{3}{4}$ | $2\frac{1}{4}$ | 15 | .35 |
| $\frac{1}{2}$ | 2 | $2\frac{3}{4}$ | 20 | .40 |

Note—When ordering, specify size of pipe thread and diameter of flange.

NEEDLE POINT VALVES

WITH VENTILATED NON-HEATING WHEEL

Designed especially to meet the requirements of oil burning apparatus. Has long taper seat and a fine stem thread which permits very close adjustment of valve. Body is made of cast brass and furnished with either brass or steel stems, globe or angle type. Valves with steel stems are for use in gasoline lines; brass stems for fuel oil.



No. 3216 Globe

| Size, Inch | Diameter of Seat Opening, Inch | Steel Stem, Each | |
|---------------|--------------------------------|------------------|----------------|
| | | No. 3216 Globe | No. 3218 Angle |
| $\frac{1}{8}$ | $\frac{3}{64}$ | \$1.20 | \$1.20 |
| $\frac{1}{4}$ | $\frac{1}{16}$ | 1.40 | 1.40 |
| $\frac{3}{8}$ | $\frac{3}{32}$ | 1.50 | 1.50 |
| $\frac{1}{2}$ | $\frac{1}{8}$ | 2.00 | 2.00 |
| $\frac{3}{4}$ | $\frac{3}{16}$ | 2.50 | 2.50 |

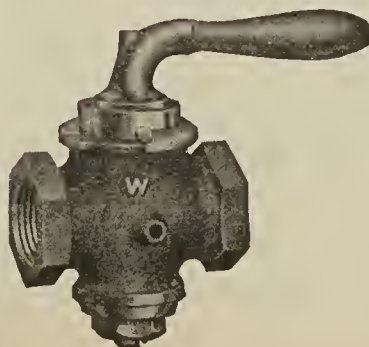
BRASS STOP COCKS

LEVER HANDLE WITH CHECK AND WASTE

Made of strictly new metal; key carefully ground into body; round lever handle; flat way; each cock tested under pressure; rough finish.

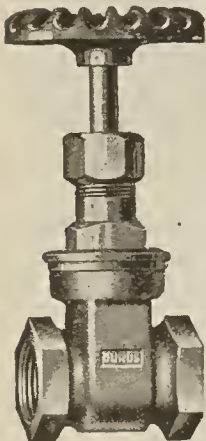
No. R3707

| Size, Inches | Each |
|----------------|--------|
| $\frac{3}{8}$ | \$1.15 |
| $\frac{1}{2}$ | 1.20 |
| $\frac{3}{4}$ | 1.55 |
| 1 | 2.87 |
| $1\frac{1}{4}$ | 4.65 |
| $1\frac{1}{2}$ | 7.85 |



BRASS GATE VALVES

No. K135 STANDARD—SCREW



Has double discs which are internally expanded by means of a tapered central wedge against machined parallel seats. Gives a perfect and positive shut-off. Has straight way passage the full area of the pipe size. Has rising stem and non-heating hand wheel; opens to the left.

| Size, Inch | Each | Size, Inch | Each |
|------------|--------|------------|--------|
| 1/4 | \$1.45 | 1 1/4 | \$3.70 |
| 3/8 | 1.45 | 1 1/2 | 5.00 |
| 1/2 | 1.65 | 2 | 7.30 |
| 3/4 | 2.05 | 2 1/2 | 13.00 |
| 1 | 2.80 | 3 | 19.00 |

BRASS GLOBE VALVES
STANDARD

TESTED TO 125 POUNDS

Made from carefully selected material and are of uniform quality metal, generously proportioned to withstand pressure. Valves can be repacked when wide open. Screw bonnet designed for use on pressures below those on which standard weight valves are required. Screw ends only.



| Size, Inch | Face to Face, Inches | Each | Size, Inch | Face to Face, Inches | Each |
|------------|----------------------|--------|------------|----------------------|--------|
| 1/8 | 1 5/8 | \$0.72 | 1 1/4 | 3 3/8 | \$2.52 |
| 1/4 | 1 5/8 | .72 | 1 1/2 | 4 | 3.50 |
| 3/8 | 1 3/4 | .77 | 2 | 4 5/8 | 5.30 |
| 1/2 | 2 1/4 | 1.00 | 2 1/2 | 5 3/8 | 10.00 |
| 3/4 | 2 1/2 | 1.26 | 3 | 6 5/8 | 14.40 |
| 1 | 2 7/8 | 1.80 | | | |

BRASS ANGLE VALVES
STANDARD



TESTED TO 125 POUNDS

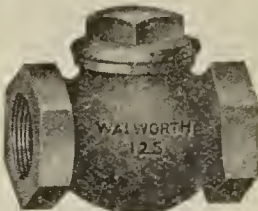
Smaller sizes, on account of foundry limitations are much heavier than necessary for conditions as rated. Valves can be repacked under pressure when wide open. Screw bonnet designed for use on pressures below those on which standard weight valves are required. Screw ends.

| Size, Inches | Center to Inlet and Outlet, Inches | Each | Size, Inches | Center to Inlet and Outlet, Inches | Each |
|--------------|------------------------------------|--------|--------------|------------------------------------|--------|
| 1/8 | ... | \$0.72 | 1 1/4 | 1 11/16 | \$2.52 |
| 1/4 | 1 3/16 | .72 | 1 1/2 | 1 15/16 | 3.50 |
| 3/8 | 1 | .77 | 2 | 2 1/4 | 5.30 |
| 1/2 | 1 1/8 | 1.00 | 2 1/2 | 3 | 10.00 |
| 3/4 | 1 1/4 | 1.26 | 3 | 3 3/4 | 14.40 |
| | 1 7/16 | 1.80 | ... | ... | ... |

BRASS CHECK VALVES
STANDARD



Vertical
No. K116



Horizontal
No. K115



Angle
No. K117

Furnished with brass plunger disc; are well proportioned of good weight and sufficiently strong to withstand 100 pounds pressure. Tested to 200 pounds; 1/8 and 1/4 inch vertical and horizontal check valves furnished with ball checks, all others with plunger discs.

SCREWED

| Size, | Face to Face, Inches No. K116 | Face to Center, Inches No. K115 | Face to Center, Inches No. K117 | Each No. K115 | Each Nos. K116, K117 |
|-------|----------------------------------|------------------------------------|------------------------------------|------------------|-------------------------|
| 1/8 | ... | ... | ... | \$0.65 | \$0.72 |
| 1/4 | 1 5/8 | 1 5/8 | 1 5/16 | .65 | .72 |
| 3/8 | 1 11/16 | 1 5/8 | 1 | .70 | .77 |
| 1/2 | 2 1/8 | 2 | 1 1/8 | .90 | 1.00 |
| 3/4 | 2 9/16 | 2 5/16 | 1 3/8 | 1.15 | 1.26 |
| 1 | 3 1/4 | 2 7/16 | 1 5/8 | 1.60 | 1.80 |
| 1 1/4 | 3 9/16 | 3 | 1 7/8 | 2.25 | 2.52 |
| 1 1/2 | 4 | 3 7/16 | 2 | 3.15 | 3.50 |
| 2 | 4 5/8 | 3 13/16 | 2 3/8 | 4.75 | 5.30 |
| 2 1/2 | 5 5/8 | 4 3/8 | 3 | 9.00 | ... |
| 3 | 6 5/8 | 4 3/4 | 3 3/4 | 13.00 | ... |

BALL CHECK VALVES



No. 439 Angle No. 116 Horizontal No. 440 Vertical

BRASS—SCREWED

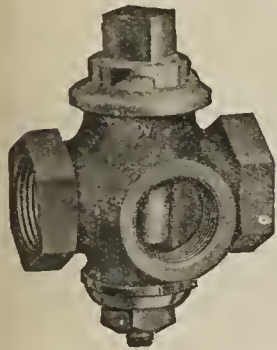
Used for pump lines handling gritty liquids and for hot water service. The non-ferrous metal balls are specially gauged and the guides are designed to minimize wear. Drain cocks can be furnished on all valves. Well proportioned and sufficiently strong to withstand 200 pounds pressure.

| Size, Inches | Face to Face, Inches, No. 116 | Face to Face, Inches, No. 440 | Center to Face, Inches, No. 439 | Each |
|--------------|-------------------------------|-------------------------------|---------------------------------|--------|
| 1/8 | 1 5/8 | 1 11/16 | 1 1/8 | \$1.15 |
| 1/4 | 1 3/4 | 1 15/16 | 1 | 1.25 |
| 3/8 | 2 3/8 | 2 1/8 | 1 1/8 | 1.45 |
| 1/2 | 2 1/2 | 2 1/4 | 1 1/4 | 2.15 |
| 3/4 | 3 1/8 | 2 3/4 | 1 5/8 | 3.10 |
| 1 | 3 3/4 | ... | 1 3/4 | 4.15 |
| 1 1/4 | 4 1/8 | 3 3/4 | 2 | 5.35 |
| 1 1/2 | 4 5/8 | 3 3/4 | 2 1/8 | 8.25 |
| 2 | 5 1/2 | 4 3/4 | 2 3/4 | 12.53 |
| 2 1/2 | 6 1/8 | 5 1/4 | 3 1/4 | 24.00 |
| 3 | 7 1/8 | 6 1/4 | 3 1/2 | 33.35 |

Emergency Replacements

A telephone, wire or letter will produce the prompt, efficient service that you may need and that we are accustomed to render.

BRASS STOP COCKS

THREE-WAY
SQUARE HEAD
WITH CHECK

Made of strictly new metal; key carefully ground into body; square head; each cock tested under 125 pounds working pressure; rough finish.

No. 3312

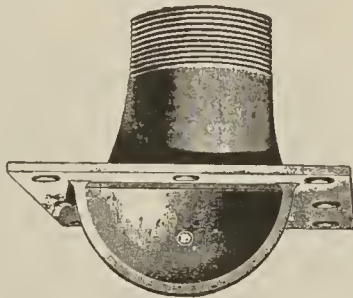
| Size, Inch | Each | Size, Inches | Each |
|---------------|--------|-----------------|--------|
| $\frac{3}{8}$ | \$2.10 | 1 | \$3.75 |
| $\frac{1}{2}$ | 2.50 | $1\frac{1}{4}$ | 5.75 |
| $\frac{3}{4}$ | 3.00 | $1\frac{1}{2}$ | 7.15 |

Note— $\frac{1}{2}$ inch size and smaller furnished with round side outlet; $\frac{3}{4}$ inch and larger have hexagonal side outlet.

UNDER WATER EXHAUSTS

CAST BRASS

Made of cast brass, plain finish; the use of the under water exhaust does away with the unnecessary and disagreeable noises so common to a motor boat.



| Nos. | For Pipe, Inches | Size of Plate, Inches | Weight Each, Lbs. | Each |
|------|---------------------|------------------------------------|----------------------|--------|
| 0 | $1\frac{1}{2}$ | $5\frac{1}{4} \times 4\frac{1}{8}$ | $2\frac{1}{4}$ | \$3.45 |
| 1 | 2 | 6 x 5 | $3\frac{3}{4}$ | 4.50 |
| 2 | $2\frac{1}{2}$ | $6\frac{1}{2} \times 5\frac{7}{8}$ | $5\frac{3}{8}$ | 6.50 |
| 3 | 3 | $7\frac{7}{8} \times 6\frac{7}{8}$ | $7\frac{7}{8}$ | 9.25 |

EXHAUST DEFLECTORS



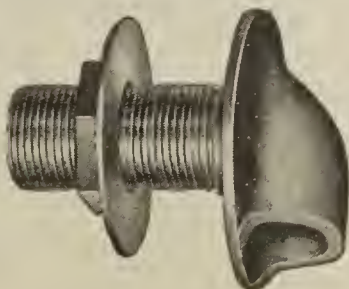
CAST BRASS

An exhaust connection to deflect the exhaust from the engine either in a downward or backward direction; may be used on side or stern of boat; has female thread in collar to screw exhaust pipe into, without using a coupling.

| For Pipe, Inches | Size Plate, Inches | Length Collar, Inches | Weight Each, Lbs. | Each |
|---------------------|-----------------------|--------------------------|----------------------|--------|
| $1\frac{1}{2}$ | 4 | 1 | $1\frac{1}{2}$ | \$2.00 |
| 2 | $4\frac{1}{8}$ | $1\frac{1}{8}$ | 2 | 2.50 |
| $2\frac{1}{2}$ | $4\frac{3}{4}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | 3.00 |
| 3 | $5\frac{7}{8}$ | $1\frac{1}{2}$ | 6 | 6.00 |
| 4 | $6\frac{3}{4}$ | $1\frac{3}{4}$ | $7\frac{1}{4}$ | 8.00 |

WATER OUTLETS

A necessity when water outlets are located on the side of boats. Hood on outlet prevents possibility of wind spraying circulating water into the boat. Flange plate also prevents staining of planking. Polished brass.

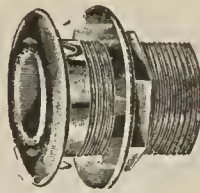


No. 332

| Nos. | Pipe, Inches | Flange, Inches | Each |
|------|---------------|----------------|--------|
| 1 | $\frac{3}{4}$ | $2\frac{3}{4}$ | \$2.00 |
| 2 | 1 | 3 | 2.50 |

INLET AND OUTLET
CONNECTIONS

Style 6789



Made of cast brass, plain finish; has standard iron pipe thread and is furnished with lock nut and washer. Through the hull connection for exhaust line on all types of boats. Inlet connections have brass wire screens.

| Size, Inch | For Planking, Inches | Outlet | Each | Inlet | Size, Inches | For Planking, Inches | Outlet | Each | Inlet |
|----------------|-------------------------|--------|--------|----------------|-----------------|-------------------------|--------|------|-------|
| $\frac{1}{2}$ | $1\frac{5}{8}$ | \$0.90 | \$1.40 | $1\frac{1}{2}$ | $2\frac{1}{4}$ | \$2.50 | \$4.25 | | |
| $\frac{3}{4}$ | $1\frac{5}{8}$ | 1.00 | 1.50 | 2 | $2\frac{1}{4}$ | 3.00 | 5.00 | | |
| 1 | $1\frac{5}{8}$ | 1.25 | 2.00 | $2\frac{1}{2}$ | $2\frac{1}{2}$ | 5.00 | 7.00 | | |
| $1\frac{1}{4}$ | $1\frac{3}{4}$ | 1.75 | 2.75 | ... | ... | ... | ... | | |

LEAD PIPE CONNECTIONS

Used with through hull connections, intake strainers and water outlets. Made of brass; iron pipe threads and tail pieces for lead pipe.

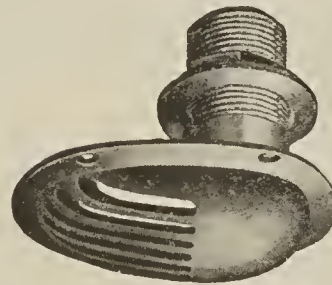


Elbow

Straight

| Size, Inches | Weight Each, Ozs. | Elbow, Each | Straight, Each |
|----------------|-------------------|-------------|----------------|
| $\frac{3}{4}$ | 8 | \$0.60 | \$0.60 |
| 1 | 11 | .75 | .75 |
| $1\frac{1}{2}$ | 16 | 1.25 | 1.25 |
| 2 | 21 | 1.75 | 1.75 |

INTAKE STRAINERS



HIGH SPEED

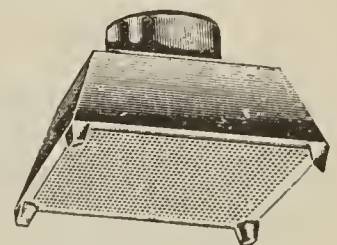
All cast brass—heavy pattern combination inlet strainer and scoop water connection; made with special flange and cup; strainer with pocket so formed that water is readily scooped in at any speed. With lock nuts and iron pipe thread.

| Size, Inch | Each | Size, Inches | Each |
|---------------|--------|-----------------|--------|
| $\frac{1}{2}$ | \$1.25 | $1\frac{1}{4}$ | \$2.50 |
| $\frac{3}{4}$ | 1.50 | $1\frac{1}{2}$ | 3.00 |
| 1 | 2.00 | ... | .... |

BILGE STRAINERS

CAST BRASS

Tapped for iron pipe. Strainer gauze is easily replaced without the necessity of soldering. Supplied in four sizes for hand and small power bilge pumps.



| Nos. | Size Strainers, Inches | For Pipe, Inches | Each |
|------|------------------------------------|---------------------|--------|
| 1T | x2 | $\frac{3}{8}$ | \$1.00 |
| 2T | $2\frac{3}{8} \times 2\frac{3}{8}$ | $\frac{3}{4}$ | 1.80 |
| 3T | $2\frac{3}{8} \times 2\frac{3}{8}$ | 1 | 2.20 |
| 4T | $2\frac{7}{8} \times 2\frac{7}{8}$ | $1\frac{1}{4}$ | 3.00 |

CAST BRASS—WITH LEAD PIPE
CONNECTION

Made of cast brass, plain finish; has standard iron pipe thread and lock nut washer. Through the hull connection for intake of water supply systems on all types of boats.

| Size, Inches | For Planking, Inches | Outlet | Each | Inlet | Size, Inches | For Planking, Inches | Outlet | Each | Inlet |
|-----------------|-------------------------|--------|--------|----------------|-----------------|-------------------------|--------|------|-------|
| $\frac{1}{2}$ | $1\frac{5}{8}$ | \$1.40 | \$1.90 | $1\frac{1}{4}$ | $1\frac{3}{4}$ | \$2.75 | \$3.75 | | |
| $\frac{3}{4}$ | $1\frac{5}{8}$ | 1.65 | 2.15 | $1\frac{1}{2}$ | $2\frac{1}{4}$ | 3.75 | 5.50 | | |
| 1 | $1\frac{3}{4}$ | 2.00 | 2.75 | 2 | $2\frac{1}{4}$ | 5.00 | 7.00 | | |

SCOOP STRAINERS



OVAL

Made of cast brass, plain finish. For high speed boats; screws to bottom of boat over inlet connection. These strainers are fastened on with openings forward and water is forced into pump by the action of the boat; are easily removed as they are not fastened to intake; No. 1 will fit over inlet connections up to $\frac{1}{2}$ inch inclusive; No. 2 fits over $\frac{3}{4}$ and 1 inch; No. 3 will fit over $1\frac{1}{4}$ and $1\frac{1}{2}$ inch. Measurements are outside.

| Nos. | Size, Inches | Each |
|------|------------------------------------|--------|
| 1 | $3\frac{1}{2} \times 2\frac{1}{2}$ | \$0.30 |
| 2 | $4\frac{7}{8} \times 3\frac{1}{4}$ | .50 |
| 3 | $6\frac{1}{4} \times 4\frac{1}{4}$ | .90 |

ROUND

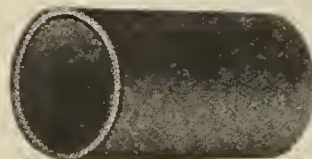
Made of cast brass, plain finish.



| Nos. | Diameter, Inches | Each | Nos. | Diameter, Inches | Each |
|------|------------------|--------|------|------------------|--------|
| 1 | $2\frac{1}{2}$ | \$0.25 | 4 | 5 | \$0.75 |
| 2 | 3 | .30 | 5 | 6 | 1.00 |
| 3 | 4 | .40 | 6 | 8 | 2.00 |

RUBBER HOSE

FOR WATER—STEAM



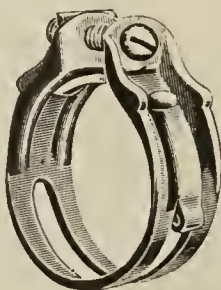
Made of extra heavy duck with special $\frac{1}{8}$ inch inner tube and is suitable for pressure work, engine cooling water service. Also suitable for water conducting service.

| Fits Over Iron Pipe, Inches | Inside Diameter, Inches | Water 4-Ply, per Foot |
|-----------------------------|-------------------------|-----------------------|
| $\frac{1}{2}$ | .84 | \$0.45 |
| $\frac{3}{4}$ | 1.05 | .50 |
| 1 | 1.315 | .62 |
| $1\frac{1}{4}$ | 1.66 | .75 |
| $1\frac{1}{2}$ | 1.90 | 1.00 |
| 2 | 2.37 | 1.25 |
| $2\frac{1}{2}$ | 2.87 | 1.50 |

HOSE CLAMPS

No. 14

Made of heavy wrought brass; cannot rust. Tongue runs in channel, holding it close to hose. Stiff ears hold bolt. Have heavy shoulders to engage vise jaws, permitting clamp to be pulled tremendously tight.



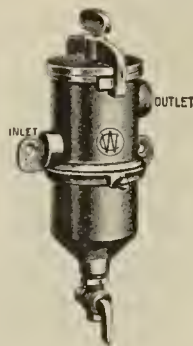
| Size and Ply, of Hose, Inches | Inside Diam. Open Inches | Number in a Box, Dozens | Weight per Dozen Lbs. | Brass, per Dozen | Galv., per Dozen |
|-------------------------------|--------------------------|-------------------------|-----------------------|------------------|------------------|
| $\frac{3}{4}$ -3 | $1\frac{1}{16}$ | 6 | $1\frac{1}{2}$ | \$0.59 | \$0.39 |
| $\frac{3}{4}$ -4 | $1\frac{17}{32}$ | 4 | $1\frac{2}{3}$ | .59 | .39 |
| 1-3 | $1\frac{5}{8}$ | 4 | $1\frac{3}{4}$ | 2.33 | .78 |
| 1-4 | $1\frac{21}{32}$ | 4 | $1\frac{3}{4}$ | 2.33 | .78 |
| $1\frac{1}{4}$ -3 | $1\frac{15}{16}$ | 3 | $2\frac{1}{2}$ | 2.80 | 1.52 |
| $1\frac{1}{4}$ -4 | $1\frac{17}{32}$ | 3 | $2\frac{1}{2}$ | 2.80 | 1.52 |
| $1\frac{1}{2}$ -3-4 | $2\frac{7}{32}$ | 3 | $2\frac{3}{4}$ | 3.35 | 1.76 |
| 2-3-4 | $2\frac{11}{16}$ | 2 | $3\frac{1}{4}$ | 4.47 | 2.45 |
| $2\frac{1}{2}$ -3-4 | $3\frac{1}{4}$ | 1 | 5 | 7.83 | 4.11 |

Exhaust Piping

The largest possible diameter of copper pipe or heavy seamless tubing is the most desirable, particularly for fast turning motors; the larger size of exhaust pipe will act as a silencer to a large extent and a $\frac{1}{8}$ -inch pipe size inlet direct connected to incoming cooling water will prevent pipe getting overheated on even large size speed boat engines.

GASOLINE STRAINERS

W C



Designed for use where fuel contains a large proportion of dirt or water. Setting chamber is of large capacity which allows filter to operate for long periods without cleaning. The screen may be easily removed for cleaning. Dirt and water may be drawn off by means of pet-cock at bottom as the larger size is sometimes used with fuel oil, a larger inlet and outlet is provided. This may be bushed to smaller size if desired. Made of bronze, plain finish; copper screen.

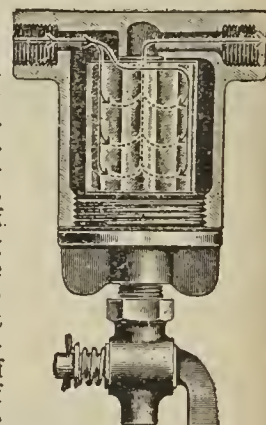
No. 881

| Size, Nos. | Length O.A. Inches | Diameter, Inches | Diameter of Screen, Inches | Pipe Size, Inches | Weight Each, Lbs. | Each |
|----------------|--------------------|------------------|----------------------------|--------------------------------|-------------------|--------|
| 1 | $8\frac{1}{4}$ | $2\frac{3}{4}$ | $1\frac{5}{8}$ | $\frac{1}{4}$ or $\frac{3}{8}$ | $2\frac{7}{8}$ | \$6.00 |
| $1\frac{1}{2}$ | 9 | $4\frac{1}{2}$ | $2\frac{3}{16}$ | $\frac{3}{8}$ or $\frac{1}{2}$ | 5 | 8.00 |
| 2 | $9\frac{1}{2}$ | $7\frac{1}{4}$ | 3 | $\frac{1}{2}$ or $\frac{3}{4}$ | 7 | 10.00 |

GASOLINE STRAINERS

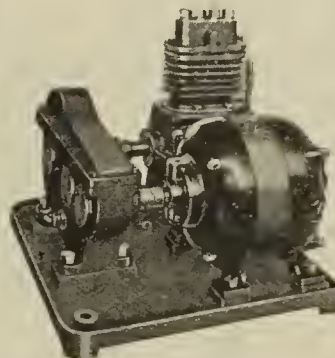
WEIWODA—TEN-IN-ONE

A non-clog self-cleaning strainer designed for use in gasoline feed lines. Has ten times more straining surface than any other type. Straining surface is built up in a multifold shape cylinder at the bottom of which is a water and dirt trap with drain cock for drawing off sediment. The fuel in passing through the strainer, centers at the top and is spread all around the top of the multifold cylinder where it falls with greatly lessened speed between the cylinder and the walls of the trap. By this slow motion of the fuel a positive separation of the fuel from water, dirt or sand is absolutely assured. Purified fuel is allowed to pass through strainer and out through top outlet, leaving all residue in trap. The entire bottom of strainer can be removed for cleaning by means of screw plug with wing. Made of die-cast brass, smooth finish. Top inlet and outlet threaded for $\frac{1}{8}$ or $\frac{1}{4}$ inch pipe.



Ten-in-One—Height Overall, 2 Inches; Width Overall, $1\frac{1}{2}$ Inches; Diameter of Cylinder, $1\frac{1}{2}$ Inches; Weight Each, $\frac{3}{4}$ Lb. \$3.00

AIR COMPRESSOR

ELECTRIC
TYPE C-1

This compressor has a $\frac{1}{4}$ H.P. electric motor flexibly connected to a gear box which is oil-tight and holds sufficient lubricant for one season's operation. The gear box in turn being flexibly connected to a two-cylinder, splash lubricated compressor. This machine is intended solely for compressing air and is used mainly to operate CUNNINGHAM,

STROMBOS and other types of air whistles.

Capacity, 1.8 cubic feet free air per minute.

Will pump to 100 lbs. pressure.

Furnished with either 12, 32 or 110 Volt D.C. motor or with 110 Volt A.C. motor.

Bore of compressor is $1\frac{1}{8}$ inches.

Stroke of compressor is $1\frac{1}{2}$ inches.

Length, 12 inches; width, $12\frac{3}{4}$ inches; height, 12 inches.

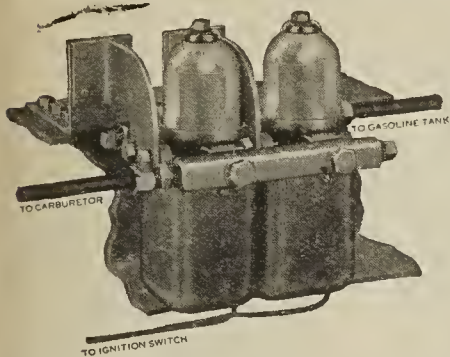
Weight, 75 pounds.

With 32 or 110 Volt $\frac{1}{4}$ H.P. Motor.....\$165.00

With 12 Volt 180.00

Automatic Pressure Controller, Extra 19.00

ELECTRIC FUEL PUMPS



AUTOPULSE

Operates direct from the battery and delivers a positive supply of fuel from tank to carburetor at all times. Not affected by vibration, angle or movement of boat. Starts immediately when ignition is turned on. When carburetor is filled pump

automatically stops. As gasoline is taken from carburetor, the pump automatically starts. Used as standard equipment by most motorboat and engine manufacturers. These pumps reduce the danger from fire as gasoline tank can be installed any distance away from the engine and the gasoline supply is instantly shut off by turning off ignition. Operates on 6 or 12-volts; the single unit will supply sufficient gasoline for any engine up to 150 H.P. and the duplex pump is used on engines of over 150 H.P. Approved by the Underwriters Laboratories. Heavy glass strainer tops give visible evidence as to working of units and gasoline supply. Easily cleaned. With $\frac{1}{8}$ and $\frac{1}{4}$ inch tubing connection. Adjustable from 1 to 2 pounds pressure. Height overall, $7\frac{1}{4}$ inches; width, $3\frac{1}{4}$ inches. Each

Single Unit—Weight Each, $3\frac{3}{8}$ Lbs. \$11.50

Double Unit—Weight Each, $6\frac{7}{8}$ Lbs. 26.00

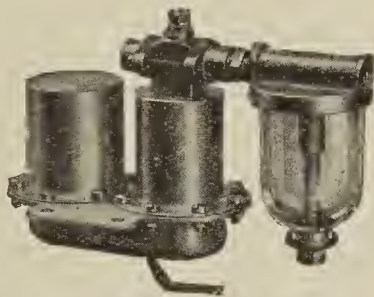
Triplex Unit—Weight Each, $10\frac{1}{2}$ Lbs. 38.50

FEED-A-MOTOR

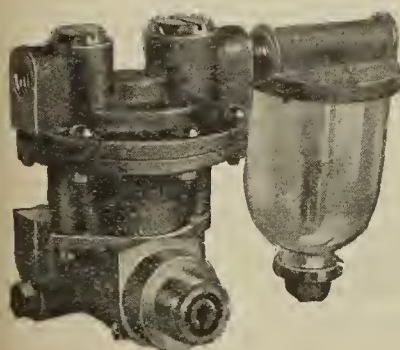
Assures the gasoline supply to any type of engine for short or long runs of any duration. Pumps any required amount of fuel up to 18 gallons per hour, regardless of motor type, speed or vacuum. Made of brass, bronze and monel metal; no fabric diaphragms or other depreciable materials are used. Eliminates fire risks, does not

require installation in engine compartment; no gasoline supplied when ignition switch is opened. Furnished with gasoline strainer; operates on either 6 or 12 volts; can be regulated as to capacity and operates easily against a five foot head. Has $\frac{1}{4}$ inch pipe and tubing connection threads. Current consumption .04 ampere at 6 volts.

| Number of Units | Capacity Gallons per Hour | Weight Each, Lbs. | With Strainer, Each |
|-----------------|---------------------------|-------------------|---------------------|
| Single | 18-20 | 3 | \$10.75 |
| Double | 36-40 | 6 | 24.00 |



JONES MECHANICAL FUEL PUMP

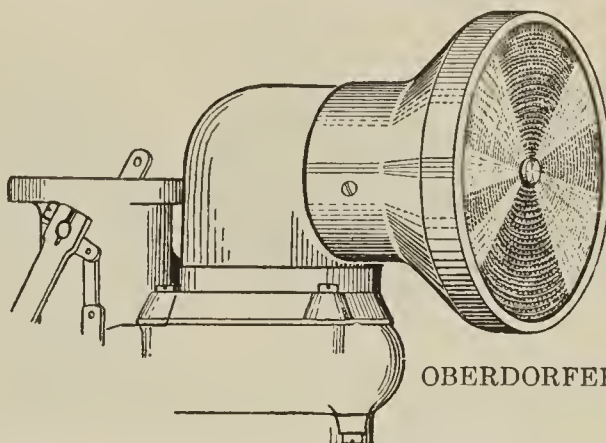


Specially designed to meet the demand for a mechanical gasoline fuel pump that could be easily attached to existing engines. The pump connects to the regular Tachometer drive on the engine and suitable provision is made to still drive the Tachometer. Pump is self-priming and is made of brass throughout. Absolutely fire-

proof of the diaphragm type. Will deliver 30 gallons per hour if necessary. Operates on either clockwise or anti-clockwise motors. Can be driven from any exposed shaft if Tachometer outlet is not part of engine design.

30 Gallon Capacity \$25.00

ENGINE BACKFIRE TRAPS



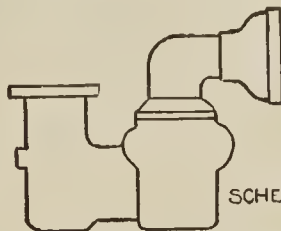
OBERDORFER

Should be installed on every gasoline motor; eliminates the danger of fire starting from backfiring of the motor. Not only arrests the flame that shoots from the air horn of the carburetor in a backfire explosion, but effectively traps and kills it as well. Built to marine specifications from non-corrosive metals. Motor crankcase vent pipes can be led to outside of trap; there is sufficient suction to draw in any smoke or fumes. Withstands the most terrific backfire and will not affect the performance of any motor. Are made in three sizes to fit motors up to 200 H.P. with single carburetors. Where more than one carburetor is used, a trap is installed on each carburetor. Made in three sizes to fit carburetors up to $2\frac{1}{2}$ inches. Various types of connections to fit traps to carburetors can be supplied extra.

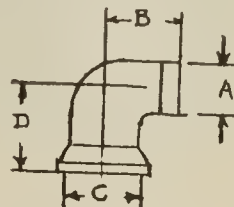
| Nos. | For Carburetors, Inches | Diameter, Inches | Length, Inches | Air Horn Conn., Diameter, Inches | Each |
|------|-----------------------------------|------------------|----------------|----------------------------------|--------|
| 1 | Under $1\frac{1}{4}$ | $3\frac{1}{2}$ | $2\frac{1}{4}$ | $1\frac{7}{8}$ | \$4.00 |
| 3 | $1\frac{1}{4}$ and $1\frac{1}{2}$ | $4\frac{1}{2}$ | $2\frac{1}{2}$ | $2\frac{3}{8}$ | 5.00 |
| 6 | $1\frac{3}{4}$ to $2\frac{1}{2}$ | $5\frac{1}{2}$ | $2\frac{3}{4}$ | 3 | 6.00 |

BACKFIRE TRAP CONNECTIONS

For fitting backfire traps to the carburetor regardless of what construction may be in front or above the carburetor.



SCHEBLER



SCHEBLER CARBURETOR CONNECTIONS

| Conn. Nos. | For Trap Nos. | Dimen. Ins. B | Ins. B | Each | Conn. Nos. | For Trap Nos. | Dimen. Ins. B | Ins. B | Each |
|------------|---------------|----------------|-----------------|--------|------------|---------------|------------------|------------------|--------|
| 1959 | 1 | $1\frac{1}{4}$ | $2\frac{1}{4}$ | \$2.00 | *1961 | 3 | $1\frac{1}{2}$ | $2\frac{1}{2}$ | \$2.25 |
| 1960 | 3 | $1\frac{1}{4}$ | $2\frac{5}{16}$ | 2.25 | 1948 | 6 | $1\frac{3}{4}$ | $2\frac{13}{16}$ | 2.50 |
| 1947 | 3 | $1\frac{1}{2}$ | $2\frac{1}{2}$ | 2.25 | 1949 | 6 | $2-2\frac{1}{2}$ | $3\frac{1}{8}$ | 2.50 |

*For front carburetor on Kermath 200 H.P. engines.

STRAIGHT CONNECTIONS

| Conn. Nos. | For Trap Nos. | Dimensions, Inches B | C | CX | Each |
|------------|---------------|----------------------|-----------------|-----------------|--------|
| 1971 | 1 | $1\frac{7}{8}$ | $1\frac{1}{2}$ | $1\frac{7}{8}$ | \$2.00 |
| 1972 | 3 | $1\frac{7}{8}$ | $2\frac{1}{16}$ | $2\frac{5}{16}$ | 2.25 |
| 1973 | 6 | $1\frac{7}{8}$ | $2\frac{5}{8}$ | $3\frac{1}{4}$ | 2.50 |

45 DEGREE CONNECTIONS

| Conn. Nos. | For Trap Nos. | Dimensions, Inches B | C | CX | Each |
|------------|---------------|----------------------|-----------------|-----------------|--------|
| 1974 | 1 | $2\frac{13}{16}$ | $1\frac{1}{2}$ | $1\frac{7}{8}$ | \$2.00 |
| 1975 | 3 | $3\frac{1}{4}$ | $2\frac{1}{16}$ | $2\frac{5}{16}$ | 2.25 |
| 1976 | 6 | $3\frac{11}{16}$ | $2\frac{5}{8}$ | $3\frac{1}{4}$ | 2.50 |

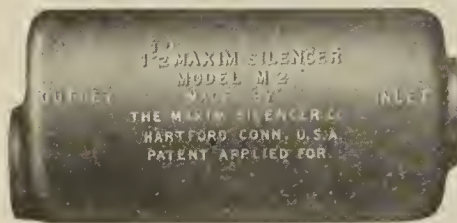
90 DEGREE CONNECTIONS

| Conn. Nos. | For Trap Nos. | Dimensions, Inches B | C | CX | Each |
|------------|---------------|----------------------|-----------------|-----------------|--------|
| 1977 | 1 | $2\frac{11}{16}$ | $1\frac{1}{2}$ | $1\frac{7}{8}$ | \$2.00 |
| 1978 | 3 | $2\frac{9}{16}$ | $2\frac{1}{16}$ | $2\frac{5}{16}$ | 2.25 |
| 1979 | 6 | 3 | $2\frac{5}{8}$ | $3\frac{1}{4}$ | 2.50 |

Note—Carburetor (C) dimension can be rebored up to the CX dimension on order.

MAXIM SILENCERS

WET TYPE



For Horizontal Installation only

Lightest cast iron motorboat non-corrosive silencer ever offered for even extremely light hulls. Withstands worst salt

water corrosion indefinitely its construction is such that it cannot clog up, or develop back pressure. Cannot possibly leak, being cast in one piece; no loose parts inside to get loose or rattle. Self-draining; no possibility of drawing back into engine if properly installed. Inlet is in center of one end and outlet at bottom of the outlet end. It will take care of all the water of the circulating system if correct size silencer is used. Can be located anywhere, close to the engine or in the stern of the boat. The water however in a stern installation should be introduced into the exhaust pipe as close to the engine as possible to avoid overheating. For best operation, it is advisable to use at least a three-foot tail pipe on the outlet end. All sizes have regular female, iron pipe threads.

| To Fit Exhaust Pipe, Inches | Diameter, Inches | Length Overall, Inches | Outlet Offset from Center, Inches | Weight Each, Lbs. | Each |
|-----------------------------|------------------|------------------------|-----------------------------------|-------------------|---------|
| 1½ | 4¾ | 9¾ | 1½ | 8¾ | \$10.00 |
| 2 | 6¼ | 11 | 1½ | 15 | 12.00 |
| 2½ | 7½ | 12¾ | 1¾ | 30 | 16.00 |
| 3 | 9½ | 13½ | 2½ | 40 | 20.00 |
| 3½ | 10¾ | 14¾ | 3 | 60 | 27.00 |
| 4 | 12¾ | 15¾ | 3½ | 80 | 30.00 |
| *5 | 14 | 23 | 4½ | 145 | 80.00 |
| *6 | 14¾ | 27½ | 4 | 170 | 115.00 |

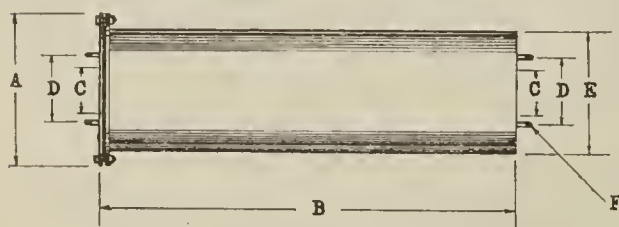
*5 and 6-inch Inlet and Outlet Standard flange connections.

Note—To choose the proper size of Maxim Silencer for a given engine exhaust, take the size of silencer that corresponds to the exhaust pipe size of the engine.

DRY TYPE

Can be furnished to order; give bore, cylinders, R.P.M. and exhaust size.

DIESEL SILENCERS



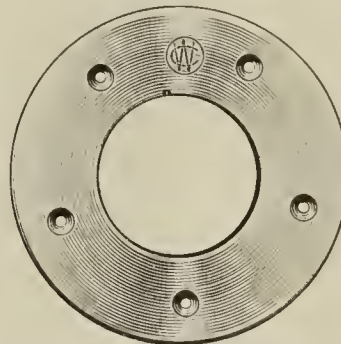
For 2- and 4-cycle motors. The inside is constructed differently on each. Specify which is wanted. Can be installed either vertically or horizontally. The 5" and 6" are threaded for standard pipe; larger sizes are made to take standard pipe flanges. When ordering, give engine specifications.

| Size | A | B | C | D | Est. Wt., Lbs. | 2-Cycle | 4-Cycle |
|------|-----|------|----|----------|----------------|---------|----------|
| 5 | 16 | 53½ | 5 | Pipe Tap | 165 | \$96.00 | \$112.00 |
| 6 | 17¾ | 58½ | 6 | Pipe Tap | 240 | 128.00 | 144.00 |
| 8 | 23½ | 66½ | 8 | 11¾ | 635 | 200.00 | 240.00 |
| 10 | 26 | 82¾ | 10 | 14¼ | 880 | 280.00 | 320.00 |
| 12 | 31¼ | 94¾ | 12 | 17 | 1415 | 400.00 | 440.00 |
| 14 | 36 | 112¾ | 14 | 18¾ | 2490 | 620.00 | 740.00 |
| 16 | 40¾ | 113¼ | 16 | 21¼ | 3025 | 760.00 | 860.00 |

Cleaning information on request.

EXHAUST PIPE FLANGES

CAST BRASS



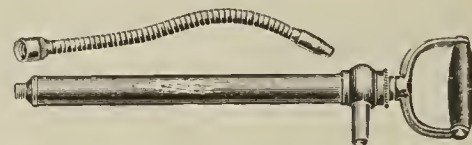
Made to fit over standard iron or brass pipe, or exhaust lines from 2 to 3½ inches, inside diameter, and over 3½, and 4 inches, outside diameter, copper or brass tubing. Made in plain or with polished finish; five screw holes in flange.

| Fits Pipe, Inches | Inside Diam., Ins. | Outside Diam., Ins. | Weight Each, Lbs. | Plain, Each | Polished Each |
|-------------------|--------------------|---------------------|-------------------|-------------|---------------|
| 2 | 2¾ | 4¾ | 1 | \$1.00 | \$1.75 |
| 2½ | 2¾ | 5¾ | 1 | 1.00 | 1.75 |
| 3 | 3½ | 6¾ | 1½ | 1.50 | 2.25 |
| 3½ | 4 | 6¾ | 1½ | 1.50 | 2.25 |

CRANK CASE PUMP

ALL BRASS
DOUBLE ACTION

Capacity per Minute — 2 Gallons

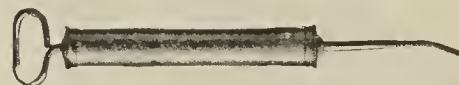


| Length Pump Overall, Inches | Length Inlet Spout, Inches | Length Outlet Spout, Inches | Diameter Pump, Inches | Weight, Lbs. |
|-----------------------------|----------------------------|-----------------------------|-----------------------|--------------|
| 17½ | 12½ | 1¾ | 1½ | 2½ |

Complete, as illustrated \$4.00
Flexible Metal Spouts Only 1.90
Moulded Rubber Hose to fit Outlet Spout, \$0.20 per foot.
Rubber hose not furnished as standard equipment.

OIL GUNS

PARAGON



For oiling bearings, filling oil cups, etc.; the barrel consists of a seamless brass tube, threaded on the ends and fitted with knurled caps; spout is 5 inches long, brass plated and made in one piece with barrel end cap; handle and plunger rod are made of ¼-inch steel rod and brass plated to match other parts of gun.

No. 4013—Size of Barrel, 1¼x8 Inches; Weight Each, ¾ Lb. \$0.60

BRASS OIL GUN

Excellent for drawing oil from crankcase or other points hard to get at. Made of solid brass, barrel 12 inches long, heavy steel rod, flexible metal hose spout; double leather plungers.

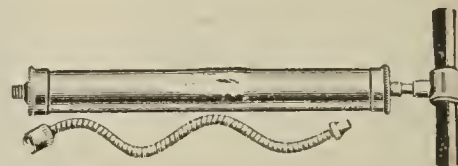


Fig. 388

| Length Overall, Inches | Length Handle, Inches | Each |
|------------------------|-----------------------|--------|
| 15½ | 5½ | \$2.75 |
| Extra Spouts..... | | 1.10 |

JUMBO



Heavy seamless brass barrel, 9¼ inches long and 2 inches in diameter. Threaded and knurled brass cap ends. Holds 15 ounces of hard grease. Change from grease to oil quickly made by turning lock nut; 5 inch combination spout provides for grease or oil; easy grip handle; highly polished. Each Jumbo—Weight Each, 24 Ounces \$2.75
One in a Box; Fifty in a Carton

GALENA

PROCESSED—MOTOR BOAT OIL



A superior Marine Lubricant which has established remarkable racing records during the past season. Motors lubricated with Galena Processed Motor Boat Oil hold 16 racing World Records and 8 National Championships. This oil is the finest 100% Pure Pennsylvania stock to start with and is especially treated with the Galena process to make it more oily, more heat-resistant, more efficient in reducing friction and wear in modern high-speed marine engines.

Galena Processed was created particularly for the better protection and operation of marine engines. It gives better piston seal, less carbon and reduces friction to the utmost degree, resulting in increased speed, reduced cost and more positive lubrication. It has given amazing results with outboard motors. Seven of twelve National Champions used it including Nub. Myers, Tommy Estlick, Hilda Meuller, John and Jackie Maypole. Because less of this remarkable oil is needed full power of gas is available and plug fouling has been almost eliminated. For ordinary service costs are cut 30-50%. Six of the countries' greatest marathons were won with Galena Processed and the motors in every case were in beautiful condition when torn down. W. & J. Tiebout are pleased to recommend GALENA PROCESSED MOTOR BOAT OIL over all other oils of the hundreds available. It is and will continue to be nationally advertised.

| Grade | Prices, per Gallon | | | | |
|--------------|--------------------------|----------------------|-----------------------|----------------------|--------------------------|
| | Spec. Hy. (S.A.E. 70) | Heavy (S.A.E. 60) | Medium (S.A.E. 50) | Light (S.A.E. 40) | Spec. Lt. (S.A.E. 30) |
| 55 Gal. Drum | \$1.20 | \$1.20 | \$1.15 | \$1.15 | \$1.15 |
| 30 Gal Drum | 1.25 | 1.25 | 1.20 | 1.20 | 1.20 |
| 5 Gal. Can | 1.45 | 1.45 | 1.40 | 1.40 | 1.40 |
| 1 Gal. Can | 1.75 | 1.75 | 1.70 | 1.70 | 1.70 |
| 1 Quart | .45 | .45 | .40 | .40 | .40 |

All prices include non-returnable containers. Order HEAVY or SPECIAL HEAVY grades for OUTBOARD use. Booklets, signs, recommendation slips available to all dealers. Samples on request.

5 Gallon Cans Packed 2 to Each Case and 1 Gallon Cans, 12 to Each Case

WATERPROOF GREASE

Compounded for marine use by experts with 63 years lubrication experience to do two major things. 1—To lubricate perfectly where water may exist. 2—To repel water which contacts with the grease. Not being affected by water—it is the finest lubricant and protection for bilge pumps, stuffing boxes, struts, gear pumps and any other use where grease and water come in contact.

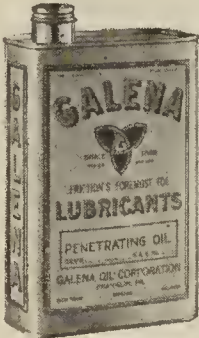


| | In Case | Per Lb. |
|-------------|---------|---------|
| 1 Lb. Can | 24 | \$0.60 |
| 5 Lb. Can | 6 | .45 |
| 10 Lb. Pail | 4 | .40 |
| 25 Lb. Drum | .. | .35 |

Price of 50 to 400 Lb. Drums on Application

GALENA

PENETRATING OIL



The oil of a thousand uses around boats and motors. It will prevent rust and loosen parts in which rust has already been formed. Invaluable in an outboard motor for preventing rust after an upset, for mixing with the oil-gasoline mixture when breaking in a new motor or new piston rings. Can be applied to any metal parts to prevent rust from setting in. Before storing the boat for winter, this oil should be applied to hinges, nuts and bolts and any metal fittings which must be kept movable. Should also be applied on metal parts susceptible to the corrosive action of salty air. It has no equal for eliminating squeaks in automobiles and spraying spring leaves. Is also very handy as a general household oil. Send for special booklet describing the many uses of GALENA PENETRATING OIL.

| | | |
|---------------------------|-----------------------|--------|
| 5 Gallon Can (2 to Case) | Per 5-Gallon Can..... | \$7.50 |
| 1 Gallon Can (6 to Case) | Per 1-Gallon Can..... | 2.50 |
| 1 Quart Can (12 to Case) | Per 1-Quart Can..... | 1.00 |

LUBRI-GUIDE

“THE PULSE OF YOUR MOTOR”

The LUBRI-GUIDE is an instrument which is attached to the lubricating system of your motor for the sole purpose of informing you of the condition of your lubricating oil while your motor is in operation. Indications given on dial.



It is a necessary accessory for safe operation since it tells you at all times the immediate condition of your oil. When the hand points to the blue sector, your oil is too heavy to circulate properly and is not giving protection to your motor.

On starting with a cool motor, the hand will point to the blue sector (even when the grade of oil is correct) until the oil warms up sufficiently to lubricate properly. When the hand of the LUBRI-GUIDE points to the red sector, it gives warning of immediate danger. Stop and investigate at once. A motor over-heating from any cause will be indicated by this danger signal. Investigate oil level, cooling water supply. If all are in order, change your oil at once. The LUBRI-GUIDE gives warning not only of oil breakdown, but of any other danger to your motor.

The LUBRI-GUIDE is selected by engineers who know, to protect investments of thousands of dollars in large machines and power plants. It also serves to prevent costly losses through lay-ups. Marine men and aviators prefer the LUBRI-GUIDE for their motors, for the failure of their motors means more than walking to the nearest garage for assistance. It frequently is a matter of life and death.

| | |
|--|---------|
| Complete with meter-gauge, tubing and all fittings ready to install. | |
| Runabout or Dash Mounting Model..... | \$15.00 |
| Regular Marine Type | 30.00 |

GLASS BODY OIL CUPS

SNAP LEVER—SIGHT FEED

For gas, gasoline and oil engine cylinders; the various functions of this oiler are visible at all times, thus insuring positive lubrication; glass body permits operator to see at a glance the amount of oil in reservoir; feed is started or stopped by merely tripping the snap lever; adjustment is regulated by knurled nut under snap lever; when once adjusted, snap lever is only part that need be touched to start and stop feed; entire assembly may be removed for cleaning by completely unscrewing the adjusting nut; made of heavy brass.



| Nos. | Capacity, Ounces | Size Pipe, Inches | Diameter Glass, Inches | Height Glass, Inches | Number in a Box | Weight per Box, Lbs. | Each |
|------|------------------|-------------------|------------------------|----------------------|-----------------|----------------------|--------|
| 5619 | $\frac{5}{8}$ | $\frac{1}{8}$ | $1\frac{1}{4}$ | $1\frac{1}{8}$ | 24 | $6\frac{1}{2}$ | \$0.90 |
| 5620 | 1 | $\frac{1}{4}$ | $1\frac{1}{2}$ | $1\frac{3}{8}$ | 24 | $9\frac{3}{8}$ | 1.00 |
| 5621 | $1\frac{1}{2}$ | $\frac{1}{4}$ | $1\frac{3}{4}$ | $1\frac{5}{8}$ | 24 | $11\frac{3}{8}$ | 1.10 |
| 5622 | $2\frac{1}{2}$ | $\frac{3}{8}$ | 2 | $1\frac{7}{8}$ | 12 | 7 | 1.25 |
| 5623 | 4 | $\frac{3}{8}$ | $2\frac{1}{4}$ | $2\frac{1}{8}$ | 12 | $9\frac{1}{8}$ | 1.45 |
| 5624 | 5 | $\frac{3}{8}$ | $2\frac{1}{2}$ | $2\frac{3}{8}$ | 6 | $6\frac{7}{8}$ | 1.60 |
| 5627 | 32 | $\frac{3}{4}$ | $4\frac{1}{4}$ | 5 | 1 | $3\frac{1}{2}$ | 4.44 |

Note—Can be furnished with ball check on order.

AIR TANKS



GALVANIZED

Especially made for use on boats to hold compressed air for whistle purposes.

Made of the best quality open hearth steel, securely riveted fittings are malleable iron and are tapped for standard pipe fittings. Spelter used is of the best quality to withstand the action of salt water. Tested to 75 pounds pressure.

| Size, inches | Weight Each, Lbs. | Each |
|--------------|-------------------|--------|
| 8x20 | 18 | \$7.00 |
| 9x20 | 22 | 7.50 |
| 10x20 | 26 | 9.00 |
| 12x20 | 39 | 10.50 |
| 12x30 | 45 | 12.50 |
| 14x30 | 50 | 15.00 |

Note—Special size tanks made to order.

MARINE GREASE CUPS

WITH SCREW FEED



Made of heavy cast brass with screw plunger; used where a positive feed is required, and grease is to be forced a great distance; all threads are accurately cut and will not leak grease; stem and plunger are cast in one piece; cap provided with knurled edge to allow substantial grip; polished finish.

Model No. 175B

| Size, Nos. | Capacity, Ounces | Outside Diameter Body, Inches | Size Pipe Thread, Inches | Number in a Box | Weight per Box, Lbs. | Each |
|------------|------------------|-------------------------------|--------------------------|-----------------|----------------------|--------|
| 00 | $\frac{1}{3}$ | 1 | $\frac{1}{8}$ | 12 | $2\frac{7}{8}$ | \$1.00 |
| 0 | 1 | 1 | $\frac{1}{4}$ | 24 | $3\frac{1}{4}$ | 1.20 |
| 1 | $1\frac{1}{2}$ | $1\frac{1}{2}$ | $\frac{1}{4}$ | 24 | $12\frac{3}{4}$ | 1.60 |
| 2 | 3 | 2 | $\frac{3}{8}$ | 24 | $18\frac{1}{4}$ | 2.00 |
| 3 | 6 | $2\frac{1}{2}$ | $\frac{1}{2}$ | 24 | 17 | 2.80 |
| 4 | 10 | 3 | $\frac{1}{2}$ | 12 | 17 | 4.00 |

COMPRESSION TYPE

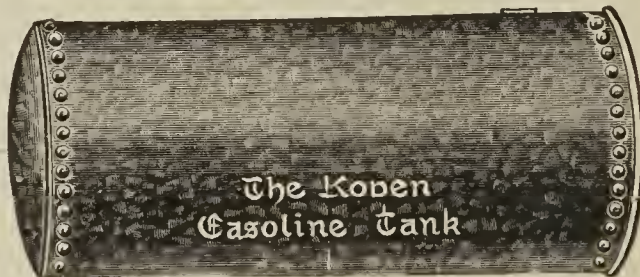
Solid cast brass grease cup; superior to stamped variety; threads are so accurately machined that it is impossible for grease to leak past; cap has broad knurl which affords a substantial grasp; satin finish.



Model No. 75

| Size, Nos. | Capacity, Ounces | Outside Diameter of Cap, Inches | Size Pipe Thread, Inches | Number in a Box | Weight per Box, Lbs. | Each |
|------------|------------------|---------------------------------|--------------------------|-----------------|----------------------|--------|
| 00 | $\frac{1}{2}$ | $1\frac{1}{8}$ | $\frac{1}{8}$ | 12 | $1\frac{1}{8}$ | \$0.54 |
| 0 | $\frac{2}{3}$ | $1\frac{3}{8}$ | $\frac{1}{4}$ | 12 | $1\frac{7}{8}$ | .62 |
| 1 | 1 | $1\frac{1}{2}$ | $\frac{1}{4}$ | 12 | $2\frac{5}{8}$ | .76 |
| 2 | 2 | 2 | $\frac{3}{8}$ | 6 | $2\frac{1}{4}$ | 1.10 |
| 3 | $3\frac{1}{2}$ | $2\frac{3}{4}$ | $\frac{1}{2}$ | 3 | $1\frac{7}{8}$ | 1.55 |
| 4 | 5 | $3\frac{1}{4}$ | $\frac{1}{2}$ | 2 | $1\frac{1}{2}$ | 1.95 |

STEEL GASOLINE TANKS



Made especially for the storage of gasoline, naphtha and kerosene on boats.

Made of the best quality of open hearth steel, securely riveted and the fittings are fastened in such a manner that they will not become loosened. When the tanks have been made they are cleaned and are then galvanized inside and outside. These tanks are free from dross which is essential as dross inside of tanks may get into the pipe connection and cause serious trouble. Can be furnished special, tin coated inside.

| Size, Inches | Approx. Capacity Gallons | Tapped Filler, Inches | Outlet, Inches | Weight Each, Lbs. | Each |
|--------------|--------------------------|-----------------------|----------------|-------------------|--------|
| 9x20 | $4\frac{1}{2}$ | 1 | $\frac{1}{4}$ | 18 | \$6.25 |
| 10x20 | $5\frac{1}{2}$ | 1 | $\frac{1}{4}$ | 20 | 7.00 |
| 12x20 | 8 | $1\frac{1}{4}$ | $\frac{1}{4}$ | 25 | 7.50 |
| 12x30 | 14 | $1\frac{1}{4}$ | $\frac{1}{4}$ | 34 | 8.00 |
| 14x30 | 20 | $1\frac{1}{4}$ | $\frac{1}{4}$ | 40 | 10.00 |
| 16x30 | 25 | $1\frac{1}{4}$ | $\frac{1}{4}$ | 56 | 11.50 |
| 16x36 | 30 | $1\frac{1}{4}$ | $\frac{1}{4}$ | 65 | 12.50 |
| 18x42 | 42 | $1\frac{1}{2}$ | $\frac{3}{8}$ | 93 | 17.50 |
| 18x48 | 50 | $1\frac{1}{2}$ | $\frac{3}{8}$ | 100 | 19.50 |
| 20x48 | 64 | $1\frac{1}{2}$ | $\frac{3}{8}$ | 120 | 21.00 |
| 20x60 | 80 | $1\frac{1}{2}$ | $\frac{3}{8}$ | 132 | 23.50 |
| 22x60 | 96 | $1\frac{1}{2}$ | $\frac{3}{8}$ | 170 | 26.00 |
| 24x60 | 110 | $1\frac{1}{2}$ | $\frac{3}{8}$ | 195 | 30.00 |

Note—Special size tanks made to order.

COPPER TANKS

Especially made for use on boats to hold gasoline or water:

| Size, Inches | Approx. Capacity, Gallons | Gauge, Ounces | Tapped Filler, Inches | Inches, Outlet | Each |
|--------------|---------------------------|---------------|-----------------------|----------------|---------|
| 14x30 | 20 | 32 | $1\frac{1}{4}$ | $\frac{1}{4}$ | \$..... |
| 16x36 | 30 | 32 | $1\frac{1}{4}$ | $\frac{1}{4}$ | ..... |
| 18x42 | 42 | 32 | $1\frac{1}{2}$ | $\frac{3}{8}$ | ..... |
| 18x48 | 50 | 32 | $1\frac{1}{2}$ | $\frac{3}{8}$ | ..... |
| 20x48 | 64 | 32 | $1\frac{1}{2}$ | $\frac{3}{8}$ | ..... |
| 20x60 | 80 | 36 | $1\frac{1}{2}$ | $\frac{3}{8}$ | ..... |
| 22x60 | 96 | 36 | $1\frac{1}{2}$ | $\frac{7}{8}$ | ..... |
| 24x60 | 110 | 36 | $1\frac{1}{2}$ | $\frac{3}{8}$ | ..... |

Prices on Application

MARINE CANS

GASOLINE AND OIL

Designed to carry a reserve of gasoline mixed with oil for outboard boats. Made of galvanized steel, double seamed and painted bright red. Provided with two openings, one for filling can and other the disappearing spout which is pulled out for use. A slight knock on the spout will start it to slide back into the can. Flexible spout cannot be lost. Made in two sizes; the 5-quart can is made to receive 1 gallon of gasoline and 1 pint of oil. The 10-quart size is made for 2 gal-



lons of gasoline and one quart of oil. Both cans provide sufficient space for mixing gas and oil together by shaking can.

| Nos | Capacity, Quarts | Width, Inches | Length, Inches | Height, Inches | Wgt. Each, Lbs. | Each |
|-----|------------------|-----------------|-----------------|------------------|-----------------|--------|
| 1 | 5 | 3 $\frac{5}{8}$ | 9 $\frac{1}{4}$ | 10 $\frac{3}{4}$ | 2 $\frac{3}{4}$ | \$2.50 |
| 2 | 10 | 7 | 9 $\frac{1}{4}$ | 10 $\frac{3}{4}$ | 3 $\frac{3}{4}$ | 3.00 |

PROPELLER SHAFTING



BRONZE PISTON FINISH

MONEL SHAFTS

EVERDUR SHAFTS

Prices on Application

FITTING PROPELLER SHAFTS

Prices on Application

IMPROVED STUFFING BOX

EXTRA HEAVY—CAST BRONZE

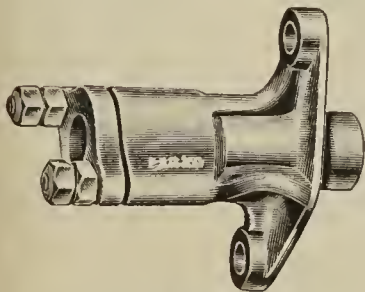


Fig. 630

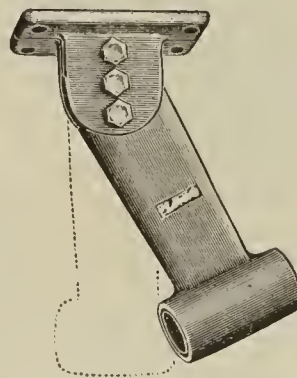
A decided improvement over the regular type of stuffing box, extremely strong and heavily constructed, no nuts to bind on shaft or turn off, used with right or left hand engines, packing gland is kept in proper adjustment by two heavy tightening nuts and two lock nuts.

| Size Shaft, Inches | Size Flange, Inches | Drilled for Fastening, Inches | Length Bearing, Inches | Plain, Each | Babbitted Each |
|--------------------|------------------------------------|-------------------------------|------------------------|-------------|----------------|
| 1 | 5 $\frac{3}{4}$ x 3 | $\frac{1}{2}$ | 5 | \$4.50 | \$6.25 |
| 1 $\frac{1}{8}$ | 6 $\frac{3}{8}$ x 3 $\frac{1}{4}$ | $\frac{1}{2}$ | 5 $\frac{1}{2}$ | 5.00 | 6.75 |
| 1 $\frac{1}{4}$ | 7 x 3 $\frac{1}{2}$ | $\frac{5}{8}$ | 6 | 6.00 | 7.75 |
| 1 $\frac{3}{8}$ | 7 $\frac{5}{8}$ x 3 $\frac{3}{4}$ | $\frac{5}{8}$ | 6 $\frac{1}{2}$ | 7.00 | 8.75 |
| 1 $\frac{1}{2}$ | 8 $\frac{1}{8}$ x 4 | $\frac{3}{4}$ | 7 | 8.50 | 10.75 |
| 1 $\frac{3}{4}$ | 9 $\frac{1}{8}$ x 4 | $\frac{3}{4}$ | 8 | 11.50 | 15.00 |
| 2 | 10 $\frac{1}{8}$ x 4 $\frac{1}{2}$ | $\frac{3}{4}$ | 9 | 14.50 | 19.00 |

ADJUSTABLE STRUTS

CAST BRONZE

Marine Babbitt Bearing—Fig. No. 628



Side View



Front View

Adjustable to any practical angle of the propeller shaft. Held fast at the desired angle by three heavy bronze bolts. Bearing is of special marine babbitt. The highest grade obtainable. Length of drop is measured from bottom of keel to center of shaft. Finished plain.

| Size Shaft, Inches | Width Flange, Inches | Length Flange, Inches | Length Bearing, Inches |
|---|----------------------|-----------------------|------------------------|
| $\frac{3}{4}$, $\frac{7}{8}$, 1, 1 $\frac{1}{8}$ | 3 | 5 $\frac{1}{2}$ | 4 $\frac{1}{8}$ |
| 1 $\frac{1}{4}$, 1 $\frac{3}{8}$, 1 $\frac{1}{2}$ | 3 $\frac{1}{2}$ | 6 $\frac{1}{2}$ | 4 $\frac{1}{2}$ |

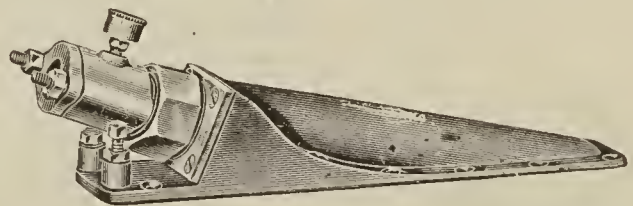
| Length Drop, Inches | Size Shaft, Inches | | | | | | |
|---------------------|--------------------|---------------|--------|-----------------|-----------------|-----------------|-----------------|
| | $\frac{3}{4}$ | $\frac{7}{8}$ | 1 | 1 $\frac{1}{8}$ | 1 $\frac{1}{4}$ | 1 $\frac{3}{8}$ | 1 $\frac{1}{2}$ |
| 5 | \$8.00 | \$8.00 | \$8.00 | ..... | ..... | ..... | ..... |
| 6 | 8.25 | 8.25 | 8.25 | \$11.25 | \$11.25 | \$13.00 | \$13.00 |
| 7 | 8.35 | 8.35 | 8.35 | 11.50 | 11.50 | 13.25 | 13.25 |
| 8 | 8.50 | 8.50 | 8.50 | 11.75 | 11.75 | 13.75 | 13.75 |
| 9 | 9.00 | 9.00 | 9.00 | 12.00 | 12.00 | 14.10 | 14.10 |
| 10 | 9.50 | 9.50 | 9.50 | 12.30 | 12.30 | 14.35 | 14.35 |
| 11 | 10.00 | 10.00 | 10.00 | 12.75 | 12.75 | 14.65 | 14.65 |
| 12 | .... | .... | .... | 13.25 | 13.25 | 15.00 | 15.00 |

Specify Size Shaft and Length of Drop, When Ordering

ADJUSTABLE SHAFT LOGS

CAST BRONZE—EXTRA HEAVY

Fig. No. 627



Without a doubt this shaft log is superior to any other as yet on the market, made entirely of high grade cast bronze, plain finish. The Stuffing Box is adjustable to any angle to accommodate the propeller shaft and is supported by two adjustable lugs to keep it from turning with the shaft should binding or freezing ever occur. Furnished complete with grease cup and rubber packing for installing.

| Nos. | Size Shaft, Inches | Length Base, Inches | Width Base, Inches | Weight, Lbs. | Each |
|------|--------------------------------------|---------------------|--------------------|--------------|---------|
| 1 | $\frac{3}{4}$, $\frac{7}{8}$, 1 | 16 | 3 $\frac{1}{2}$ | 14 | \$13.75 |
| 2 | 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$ | 22 | 4 $\frac{1}{4}$ | 16 | 20.00 |
| 3 | 1 $\frac{3}{8}$, 1 $\frac{1}{2}$ | 26 | 5 | 18 | 29.50 |

Specify Shaft Size When Ordering

STUFFING BOXES



PLAIN

Plain pattern cast brass stuffing box with reamed shaft hole. Flange drilled for lag screws or bolts; extra heavy hexagon packing collar and lock nut. Plain finish.

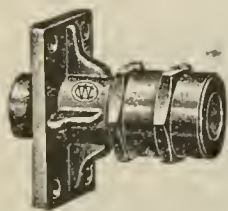
| Bored for Shaft, Ins. | Size Flange, Inches | Size Flange Holes, Inch | Length Bearing, Inches | Each |
|-----------------------|---------------------|-------------------------|------------------------|--------|
| 3/4 | 4 x 1 1/8 | 3/8 | 2 1/8 | \$1.50 |
| 7/8 | 4 x 1 1/8 | 7/8 | 2 5/8 | 1.75 |
| 1 | 4 1/4 x 2 1/8 | 1 1/8 | 2 1/2 | 2.00 |
| 1 1/8 | 5 x 2 1/4 | 1/2 | 2 7/8 | 2.50 |
| 1 1/4 | 5 3/4 x 2 7/8 | 1/2 | 3 | 3.00 |
| 1 3/8 | 6 1/4 x 2 5/8 | 1/2 | 3 | 3.75 |
| 1 1/2 | 6 1/2 x 2 15/16 | 1/2 | 3 | 4.50 |
| 1 5/8 | 6 3/4 x 3 5/16 | 1/2 | 3 3/8 | 5.25 |
| 1 3/4 | 6 7/8 x 3 1/8 | 5/8 | 3 3/4 | 6.50 |

EXTRA HEAVY

For use on small work boats, cruisers, etc. Made of cast brass, plain pattern and finish with ribbed flanges; shaft holes are reamed; flanges are drilled for lag screw or bolt fastenings. Hexagon packing collar and lock nut are extra heavy. Furnished plain or with a babbitt bearing to reduce friction in shaft.



| Bored for Shaft, Inches | Size Flange, Inches | Size Flange, Holes, Inch | Length Bearing, Inches | Each | Each |
|-------------------------|---------------------|--------------------------|------------------------|--------|-----------|
| | | | | Plain | Babbitted |
| 3/4 | 4 x 2 5/8 | 7/16 | 3 5/8 | \$3.50 | \$4.75 |
| 7/8 | 4 3/4 x 2 7/8 | 7/16 | 4 | 4.00 | 5.50 |
| 1 | 6 3/8 x 3 3/8 | 1/2 | 4 1/4 | 4.50 | 6.25 |
| 1 1/8 | 6 1/2 x 3 1/4 | 1/2 | 4 3/8 | 5.00 | 6.75 |
| 1 1/4 | 6 7/8 x 3 5/8 | 5/8 | 4 3/4 | 6.00 | 7.75 |
| 1 3/8 | 7 3/4 x 3 7/8 | 5/8 | 5 3/8 | 7.00 | 8.75 |
| 1 1/2 | 8 1/2 x 4 1/8 | 5/8 | 6 | 8.50 | 10.75 |
| 1 5/8 | 9 x 4 1/4 | 3/4 | 6 1/2 | 10.00 | 13.25 |
| 1 3/4 | 9 3/4 x 4 3/8 | 3/4 | 7 | 11.50 | 15.00 |
| 1 7/8 | 9 3/4 x 4 3/8 | 3/4 | 7 1/2 | 13.00 | 17.00 |
| 2 | 10 3/8 x 4 5/8 | 3/4 | 8 | 14.50 | 19.00 |



HEAVY—RECTANGULAR BASE

of cast brass, plain patterns.

With rectangular base for four fastenings; has ribbed flange. Shaft holes are reamed and flanges are drilled for lag screw or bolt fastenings. Have extra heavy packing collars and hexagon lock nuts. For use on cruisers, work boats, small tug boats, etc. Made plain finish; furnished in plain or babbitted

| Bored For Shaft, Inches | Size Flange, Inches | Size Flange Holes, Inches | Length Bearing, Inches | Each | Each |
|-------------------------|---------------------|---------------------------|------------------------|-------|-----------|
| | | | | Plain | Babbitted |
| 1 1/4 | 5 1/2 x 3 1/2 | 1/2 | 4 5/8 | 6.75 | \$8.50 |
| 1 3/8 | 6 x 4 | 1/2 | 5 1/8 | 8.00 | 9.25 |
| 1 1/2 | 6 x 4 3/8 | 1/2 | 5 5/8 | 10.00 | 12.25 |
| 1 3/4 | 6 1/2 x 4 1/2 | 5/8 | 7 | 12.50 | 16.00 |
| 2 | 7 1/2 x 4 3/4 | 5/8 | 7 7/8 | 16.00 | 20.50 |

Note—Above stuffing box can be furnished for shafts up to 4 inches; prices upon application.

STUFFING BOXES

THREADED



Made of cast bronze, plain finish. Threaded inside for pipe or tubing, iron pipe, threads. For use with threaded stern bearings where there is an incurable leak in the regular stuffing box. Can be used either inside or outside. Joined together with either pipe or tubing.

| Bored for Shaft, Inches | Size Flange, Inches | For Standard Iron Piped Thread, Inches | Each |
|-------------------------|---------------------|--|--------|
| 3/4 | 4 x 2 1/4 | 3/4 | \$2.00 |
| 7/8 | 4 x 2 1/4 | 1 | 2.25 |
| 1 | 4 1/4 x 2 1/2 | 1 | 2.75 |
| 1 1/8 | 4 1/4 x 2 1/2 | 1 1/4 | 3.25 |
| 1 1/4 | 6 x 2 5/8 | 1 1/4 | 4.00 |
| 1 3/8 | 6 1/2 x 3 | 1 1/2 | 5.00 |
| 1 1/2 | 6 1/2 x 3 1/8 | 1 1/2 | 5.50 |

STERN BEARINGS

THREADED

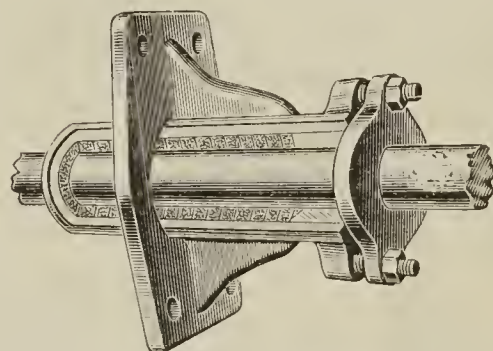
Made of cast bronze, plain finish; threaded inside for pipe or tubing, iron pipe threads; for use with threaded stuffing boxes where there is an incurable leak in the regular stuffing box; can be used either inside or outside of boat; joined to stuffing box with pipe or tubing.



| For Shaft, Inches | Size Flange, Inches | Iron Pipe, Thread, Inches | Each |
|-------------------|---------------------|---------------------------|--------|
| 3/4 | 4 x 2 1/4 | 3/4 | \$1.25 |
| 7/8 | 4 x 2 1/4 | 1 | 1.50 |
| 1 | 4 1/4 x 2 1/2 | 1 | 1.75 |
| 1 1/8 | 4 1/4 x 2 1/2 | 1 1/4 | 2.00 |
| 1 1/4 | 6 x 2 5/8 | 1 1/4 | 2.25 |
| 1 3/8 | 6 1/2 x 3 | 1 1/2 | 2.75 |
| 1 1/2 | 6 1/2 x 3 1/8 | 1 1/2 | 3.25 |

THE "EVERGOOD"

FLAX PACKED COMBINATION STUFFING BOX AND STERN BEARING



A combination of Stuffing Box and Stern Bearing; sand or grit cannot cut or score either the packing bearing surface or the shaft; the flax packing impregnated with graphite reduces friction, wear

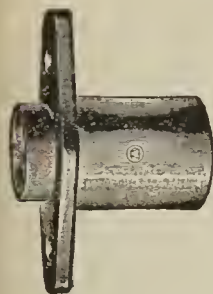
and loss of power to the minimum; no metal bearing contact—no friction—no wear.

Simplicity of packing has not been overlooked in the design. Two nuts easily reached keep the packing gland in perfect adjustment. Long life packing makes need of adjustments rare.

Neither the propeller nor strut need be removed to install new packing; packing comes cut in split rings. To put in new packing loosen two nuts on the studs which hold the gland, remove the gland, slip packing rings around the shaft, replace glands and tighten up. This can even be done on boats of medium draft without hauling the boat out.

| Shaft Size, Inches | Base Dimensions, Inches | Length of Bearing, Inches | Drilled for Fastening, Inches | Each |
|--------------------|-------------------------|---------------------------|-------------------------------|--------|
| 1 | 5 3/4 x 3 | 5 7/8 | 7/16 | \$6.25 |
| 1 1/8 | 6 x 3 | 6 1/4 | 7/16 | 7.00 |
| 1 1/4 | 6 3/4 x 3 1/2 | 6 7/8 | 1/2 | 7.75 |
| 1 3/8 | 7 x 3 7/8 | 7 | 1/2 | 8.75 |
| 1 1/2 | 7 1/2 x 4 1/4 | 7 3/8 | 1/2 | 11.00 |
| 1 3/4 | 8 1/2 x 4 7/8 | 8 1/4 | 5/8 | 16.00 |
| 2 | 9 1/2 x 5 1/4 | 9 1/4 | 5/8 | 20.00 |

STERN BEARINGS



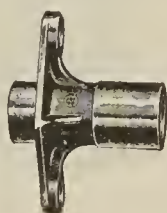
PLAIN

Plain pattern; cast brass stern bearings with reamed shaft hole; flange drilled for lag screws or bolts; plain brass finish; used on small runabouts and open boats.

| Bored for Shaft, Inches | Size Flange, Inches | Size Flange, Hole, Inch | Each | Bored for Shaft, Inches | Size Flange, Inches | Size Flange, Hole, Inch | Each |
|-------------------------|---------------------|-------------------------|----------------------|-------------------------|---------------------|-------------------------|--------------------|
| $\frac{3}{4}$ | 4 | x $1\frac{1}{16}$ | $\frac{3}{8}$ \$1.00 | $1\frac{1}{4}$ | $5\frac{3}{4}$ | x $2\frac{7}{16}$ | .. \$2.00 |
| $\frac{7}{8}$ | 4 | x $1\frac{1}{8}$ | $\frac{1}{16}$ 1.25 | $1\frac{3}{8}$ | $6\frac{1}{4}$ | x $2\frac{15}{16}$ | $\frac{1}{2}$ 2.50 |
| 1 | $4\frac{1}{4}$ | x $2\frac{1}{8}$ | $\frac{7}{16}$ 1.50 | $1\frac{1}{2}$ | $6\frac{1}{2}$ | x $2\frac{15}{16}$ | $\frac{1}{2}$ 3.25 |
| $1\frac{1}{8}$ | 5 | x $2\frac{1}{4}$ | $\frac{1}{2}$ 1.75 | $1\frac{3}{4}$ | $6\frac{7}{8}$ | x $3\frac{1}{16}$ | $\frac{5}{8}$ 4.00 |

EXTRA HEAVY

For use on small work boats, small cruisers, etc.; made of cast brass, plain pattern and finish with ribbed flanges; has reamed shaft hole; flange drilled for lag screw or bolt fastenings; furnished in plain or with a babbitt bearing.



| Bored for Shaft, Ins. | Size Flange, Inches | Size Flange, Hole, Inch | Weight Each, Lbs. | Each | Babbitted |
|-----------------------|---------------------|-------------------------|--------------------------------|--------|-----------|
| $\frac{3}{4}$ | $5\frac{1}{4}$ | x $2\frac{5}{8}$ | $\frac{7}{16}$ 3 $\frac{5}{8}$ | \$2.50 | \$3.75 |
| $\frac{7}{8}$ | $5\frac{1}{4}$ | x $2\frac{7}{8}$ | $\frac{7}{16}$ 4 | 2.75 | 4.25 |
| 1 | $6\frac{3}{8}$ | x $3\frac{3}{8}$ | $\frac{1}{2}$ $4\frac{1}{4}$ | 3.00 | 4.75 |
| $1\frac{1}{8}$ | $6\frac{1}{2}$ | x $3\frac{1}{4}$ | $\frac{1}{2}$ $4\frac{3}{8}$ | 3.25 | 5.00 |
| $1\frac{1}{4}$ | $6\frac{7}{8}$ | x $3\frac{5}{8}$ | $\frac{5}{8}$ $4\frac{3}{4}$ | 3.75 | 5.50 |
| $1\frac{3}{8}$ | $7\frac{3}{4}$ | x $3\frac{7}{8}$ | $\frac{5}{8}$ $5\frac{3}{8}$ | 4.50 | 6.25 |
| $1\frac{1}{2}$ | $8\frac{1}{2}$ | x $4\frac{1}{8}$ | $\frac{5}{8}$ 6 | 5.50 | 7.75 |
| $1\frac{5}{8}$ | 9 | x $4\frac{1}{4}$ | $\frac{3}{4}$ $6\frac{1}{2}$ | 6.75 | 10.00 |
| $1\frac{3}{4}$ | $9\frac{3}{4}$ | x $4\frac{3}{8}$ | $\frac{3}{4}$ 7 | 8.00 | 11.50 |
| $1\frac{7}{8}$ | $9\frac{3}{4}$ | x $4\frac{3}{8}$ | $\frac{3}{4}$ $7\frac{1}{2}$ | 9.25 | 13.25 |
| 2 | $10\frac{3}{8}$ | x $4\frac{5}{8}$ | $\frac{3}{4}$ 8 | 10.75 | 15.25 |



HEAVY

RECTANGULAR BASE

With rectangular base for four fastenings; has ribbed flanges; shaft holes are reamed and flanges are drilled for lag screw or bolt fastenings; for use on cruisers, work boats, small tug boats, etc.

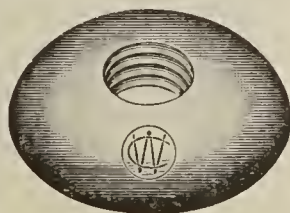
Made of cast brass, plain finish; furnished in plain or babbitted patterns.

| Bored for Shaft, Ins. | Size Flange, Inches | Size Flange, Holes, Inch | Length Bearing, Inches | Each | Babbitted |
|-----------------------|---------------------|--------------------------|------------------------------|-------|-----------|
| $1\frac{1}{4}$ | $5\frac{1}{2}$ | x $3\frac{1}{2}$ | $\frac{1}{2}$ $4\frac{5}{8}$ | 4.50 | \$6.25 |
| $1\frac{3}{8}$ | 6 | x 4 | $\frac{1}{2}$ $5\frac{1}{8}$ | 5.50 | 7.25 |
| $1\frac{1}{2}$ | 6 | x $4\frac{3}{8}$ | $\frac{1}{2}$ $5\frac{5}{8}$ | 6.50 | 8.25 |
| $1\frac{3}{4}$ | $6\frac{1}{2}$ | x $4\frac{1}{2}$ | $\frac{5}{8}$ 7 | 9.00 | 12.50 |
| 2 | $7\frac{1}{2}$ | x $4\frac{3}{4}$ | $\frac{5}{8}$ $7\frac{7}{8}$ | 11.75 | 16.25 |

ENGINE BED WASHERS

STYLE No. 8380

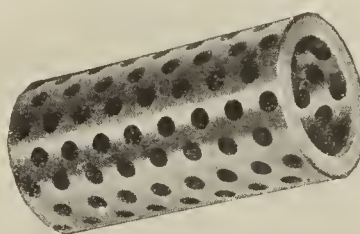
Fit easily in the narrow space between boat planking and the bottom of the engine bed. Does away with the unsatisfactory lag or hanger bolt motor fastenings. Easier to handle than a nut. Plain cast brass; tapped U.S.S. thread. Outside diameter, $1\frac{1}{2}$ inches; thickness, $\frac{5}{16}$ inch.



| Size, Inch | Weight per 100, Lbs. | Per 100 |
|---------------|----------------------|---------|
| $\frac{3}{8}$ | 12 | \$10.00 |
| $\frac{1}{2}$ | $10\frac{1}{2}$ | 10.00 |

AQUA BEARINGS

FOR STRUTS AND STERN BEARINGS



The design and principle of manufacture of Aqua Bearings are, as the name implies, particularly adapted for marine bearing in the form of cylindrical plugs, being impervious to the action of water.

For stern and strut bearings, the chamfered ends and the spaced grooves, running the full length, permit the flow of water to clear the bearing surface of any grit or sand.

For the installation of stern tube bearings we recommend the introduction of water ahead of the bearing and suggest strut bearings be open at both ends. This will provide a continuous flow of water and prevent possible accumulation of sand between the bearing and shaft.

Aqua Bearings are made with great care and precision from high quality cast bronze and are supplied with proper clearance for the specified shaft diameter, ready to install, and should not be further machined. Stock or special sizes made to your own dimensions can be supplied on short notice.

| Shaft Diam., Inches | Outside Diam., Inches | Length, Inches | Each | For Shaft Diam., Inches | Outside Diam., Inches | Length, Inches | Each |
|---------------------|-----------------------|----------------|--------|-------------------------|-----------------------|----------------|---------|
| $\frac{3}{4}$ | $1\frac{1}{4}$ | 3 | \$5.00 | $1\frac{1}{2}$ | 2 | $5\frac{1}{2}$ | \$11.50 |
| $\frac{7}{8}$ | $1\frac{3}{8}$ | $3\frac{1}{2}$ | 6.00 | $1\frac{1}{2}$ | 2 | 6 | 11.50 |
| 1 | $1\frac{1}{2}$ | 4 | 6.90 | $1\frac{1}{2}$ | $2\frac{3}{8}$ | $5\frac{1}{2}$ | 11.50 |
| 1 | 2 | 4 | 6.90 | $1\frac{1}{2}$ | $2\frac{3}{8}$ | 6 | 11.50 |
| $1\frac{1}{8}$ | 2 | $4\frac{1}{2}$ | 7.00 | $1\frac{1}{2}$ | $2\frac{5}{8}$ | 6 | 12.50 |
| $1\frac{1}{8}$ | $1\frac{5}{8}$ | $4\frac{1}{2}$ | 8.75 | $1\frac{5}{8}$ | $2\frac{5}{8}$ | $6\frac{1}{2}$ | 14.00 |
| $1\frac{1}{8}$ | $1\frac{5}{8}$ | 5 | 9.00 | $1\frac{3}{4}$ | $2\frac{3}{8}$ | 7 | 17.00 |
| $1\frac{1}{8}$ | $1\frac{7}{8}$ | 5 | 9.00 | $1\frac{3}{4}$ | $2\frac{5}{8}$ | 7 | 17.00 |
| $1\frac{1}{8}$ | 2 | $4\frac{1}{2}$ | 8.75 | $1\frac{7}{8}$ | $2\frac{15}{16}$ | $7\frac{1}{2}$ | 19.00 |
| $1\frac{1}{4}$ | $1\frac{3}{4}$ | 5 | 9.00 | 2 | $2\frac{5}{8}$ | 8 | 19.00 |
| $1\frac{1}{4}$ | $2\frac{1}{8}$ | 5 | 9.00 | 2 | 3 | 6 | 19.00 |
| $1\frac{3}{8}$ | $1\frac{7}{8}$ | $5\frac{1}{2}$ | 9.50 | 2 | 3 | $6\frac{1}{2}$ | 19.00 |
| $1\frac{3}{8}$ | $2\frac{3}{8}$ | $5\frac{1}{2}$ | 11.50 | 2 | 3 | 8 | 19.00 |

GOODRICH CUTLESS BEARINGS



Superior in every way to babbitted or lignum-vitae bearings. Consists of a bronze sleeve lined with a highly resilient tough rubber compound, rifled to allow the passage of

water for lubrication and for ejecting sand and grit without cutting shaft or bearing. Also eliminates shaft vibration.

| For Shaft Diam., Inches | Outside Diam., Inches | Length, Inches | Each | For Shaft Diam., Inches | Outside Diam., Inches | Length, Inches | Each |
|-------------------------|-----------------------|----------------|--------|-------------------------|-----------------------|----------------|---------|
| $\frac{3}{4}$ | $1\frac{1}{4}$ | 3 | \$5.80 | $1\frac{1}{2}$ | 2 | 6 | \$13.50 |
| $\frac{7}{8}$ | $1\frac{3}{8}$ | $3\frac{1}{2}$ | 6.75 | $1\frac{1}{2}$ | $2\frac{3}{8}$ | 6 | 13.50 |
| 1 | $1\frac{1}{2}$ | 4 | 7.80 | $1\frac{5}{8}$ | $2\frac{1}{8}$ | $6\frac{1}{2}$ | 15.25 |
| 1 | 2 | 4 | 7.80 | $1\frac{5}{8}$ | $2\frac{5}{8}$ | $6\frac{1}{2}$ | 15.25 |
| $1\frac{1}{8}$ | $1\frac{5}{8}$ | $4\frac{1}{2}$ | 9.20 | $1\frac{3}{4}$ | $2\frac{3}{8}$ | 7 | 17.30 |
| $1\frac{1}{8}$ | $1\frac{3}{4}$ | $4\frac{1}{2}$ | 9.20 | $1\frac{3}{4}$ | $2\frac{5}{8}$ | 7 | 17.30 |
| $1\frac{1}{8}$ | 2 | $4\frac{1}{2}$ | 9.20 | $1\frac{7}{8}$ | $2\frac{5}{8}$ | $7\frac{1}{2}$ | 18.90 |
| $1\frac{1}{4}$ | $1\frac{3}{4}$ | 5 | 10.60 | $1\frac{7}{8}$ | $2\frac{15}{16}$ | $7\frac{1}{2}$ | 18.90 |
| $1\frac{1}{4}$ | $2\frac{1}{8}$ | 5 | 10.60 | 2 | $2\frac{5}{8}$ | 8 | 20.40 |
| $1\frac{3}{8}$ | $1\frac{7}{8}$ | $5\frac{1}{2}$ | 11.40 | ... | ... | ... | ... |
| $1\frac{3}{8}$ | $2\frac{3}{8}$ | $5\frac{1}{2}$ | 11.40 | ... | ... | ... | ... |

Prices on Larger Sizes Upon Application

Note—When ordering give actual shaft diameter, outside diameter and length of bearing desired. Where bearings are required for shaft sizes coming between those listed, spiral grooved bearings will be furnished at next higher price.

TACHOMETERS

A. C. UNIT PANELS—FOR MARINE SERVICE



Type F5—3-Unit Panel—Black

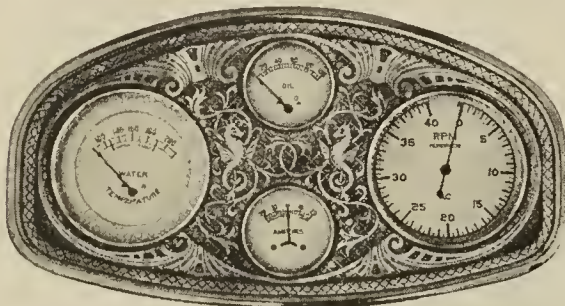
Instrument panels are of brass, beautifully etched, silver plated and black lacquered with outer rim chrome plated. Three types are available, holding three, four or five instruments—the fifth opening being for a switch. These panels measure $11\frac{1}{4} \times 6\frac{3}{4}$ inches. Rust-proof mounting brackets are furnished with all panels. Lighting used is of the indirect type, all instruments being under glass and lighted through windows in the rear. All instruments are of brass and chrome plated and cases are cadmium plated. Instrument faces are silver etched with black letters and lacquered for the silver-plated panels and with silver and black dials with red pointer tips for the black panels. All panels are immune from corrosion. No bulbs or drive shafts are furnished with panels.

UNIT ASSEMBLIES

3-Unit Panels

With tachometer, ammeter calibrated 20-0-20 and 0 to 100 oil pressure gauge. Without shafting or angle adapter.

| Nos. | | R.P.M. Range | Direction of Rotation | Speed | Etched, Silvered, Each | Black, Each |
|----------|-------|-----------------|--------------------------|--------|------------------------------|----------------|
| Silvered | Black | | | | | |
| C-1 | F-1 | 2500 | Clock. | Cam. | \$47.50 | \$31.00 |
| C-2 | F-2 | 2500 | Counter C. | Cam. | 47.50 | 31.00 |
| C-3 | F-3 | 2500 | Clock. | Engine | 47.50 | 31.00 |
| C-4 | F-4 | 2500 | Counter C. | Engine | 47.50 | 31.00 |
| C-5 | F-5 | 4000 | Clock. | Cam. | 47.50 | 31.00 |
| C-6 | F-6 | 4000 | Clock. | Engine | 47.50 | 31.00 |



Type D5—4-Unit Panel—Etched Silver

With large Thermo-Gauge, Tachometer, Ammeter calibrated to 20-0-20 and 0 to 100 pound oil pressure gauge. Without shafting or angle adapter.

| Nos. | | R.P.M. Range | Direction of Rotation | Speed | Etched, Silvered, Each | Black, Each |
|----------|-------|-----------------|--------------------------|--------|------------------------------|----------------|
| Silvered | Black | | | | | |
| D-1 | X-1 | 2500 | Clock. | Cam. | \$52.50 | \$35.00 |
| D-2 | X-2 | 2500 | Counter C. | Cam. | 52.50 | 35.00 |
| D-3 | X-3 | 2500 | Clock. | Engine | 52.50 | 35.00 |
| D-4 | X-4 | 2500 | Counter C. | Engine | 52.50 | 35.00 |
| D-5 | X-5 | 4000 | Clock. | Cam. | 52.50 | 35.00 |
| D-6 | X-6 | 4000 | Clock. | Engine | 52.50 | 35.00 |

*5-Unit Panels

| | | | | | | |
|-----|-----|------|------------|--------|---------|---------|
| E-1 | H-1 | 2500 | Clock. | Cam. | \$52.50 | \$35.00 |
| E-2 | H-2 | 2500 | Counter C. | Cam. | 52.50 | 35.00 |
| E-3 | H-3 | 2500 | Clock. | Engine | 52.50 | 35.00 |
| E-4 | H-4 | 2500 | Counter C. | Engine | 52.50 | 35.00 |
| E-5 | H-5 | 4000 | Clock. | Cam. | 52.50 | 35.00 |
| E-6 | H-6 | 4000 | Clock. | Engine | 52.50 | 35.00 |

*Four instruments only furnished.

Note—Shafting, because of variation in lengths must be ordered separately. Price per inch \$0.04. Angle adapters are generally not necessary. If required, they can be furnished for \$4.00 each. Specify if for attachment on tachometer or engine end of flexible shafting.

A. C.—OUTBOARD



Accurately registers from 0 to 8000 revolutions per minute. Waterproof head and casing; live rubber gaskets in front and rear of case; rubber sleeve encases shaft at instrument head. A snap ring prevents drive adapter from jumping off nickel steel drive pin in rough water. Hardened steel drive nut jaws prevent break-

age. Aluminum frame. Soft threads in drive nut prevent damage to threads on flywheel shaft. Furnished complete with 8 foot shaft and attachments. Has S.A.E. connections.

Note—Specify make and model motor when ordering.

| | |
|---|------------|
| All A.C.—Outboard Tachometer Outfits..... | Per Outfit |
| Without Flywheel Nuts..... | \$18.50 |
| A.C. Flywheel Nuts | Each |
| | \$1.50 |

A. C. INDIVIDUAL MOUNTING



Accurate, compensated magnetic type tachometer that is immune from corrosion in salt water service. Has but two moving parts with no mechanical connection between these parts. Has sapphire, long life bearing and chrome plated shaft and individual rust-proof clamp adjustable to dash thicknesses from $\frac{1}{8}$ to

$1\frac{1}{2}$ inches. It is $3\frac{3}{8}$ inches across the face, requires a $3\frac{1}{2}$ inch hole in instrument board and is $2\frac{3}{4}$ inches deep. Has a brass chrome plated bezel, black dial with special white easily read figures and is furnished in either clockwise or counter-clockwise movement and in four ranges, 0 to 2500; 0 to 4000; 0 to 6000 and 0 to 8000 R.P.M.

Back outlet for flexible shafting which is not included in the instrument price. Regularly supplied direct engine speed (1 to 1) reading, but can be furnished at no extra cost for cam shaft speed, (2 to 1) or generator speed (3 to 1) (2 to 1), etc. as specified. Weight each, 1 pound.

| Type Nos. | Range Revolutions | Direction of Rotation | Speed | Each |
|--------------|----------------------|--------------------------|----------|---------|
| T-1 | 0-2500 | Clockwise | Camshaft | \$25.00 |
| T-2 | 0-2500 | Clockwise | Engine | 25.00 |
| T-3 | 0-2500 | Counter Clock | Camshaft | 25.00 |
| T-4 | 0-2500 | Counter Clock | Engine | 25.00 |
| T-5 | 0-4000 | Clockwise | Camshaft | 25.00 |
| T-6 | 0-4000 | Clockwise | Engine | 25.00 |

Tachometers for Panel Boards. Silver Etched 30.00

Tachometers for Panel Boards. Black 21.00

Note—No flexible shafting is supplied with tachometer.

UNIT ASSEMBLY VARIATIONS

Three unit panels may also be had with large size Thermo-Gauge, (motor heat indicator) replacing tachometer or with small size Thermo-Gauge with twelve feet of capillary tubing, replacing either oil gauge or ammeter shown. Price upon application. Four unit panels like type D-5 may also be had with two tachometers for twin screw craft or two large Thermo-Gauges as well as two each oil gauges or ammeter. Price upon application.

CONSOLIDATED MARINE PANELS

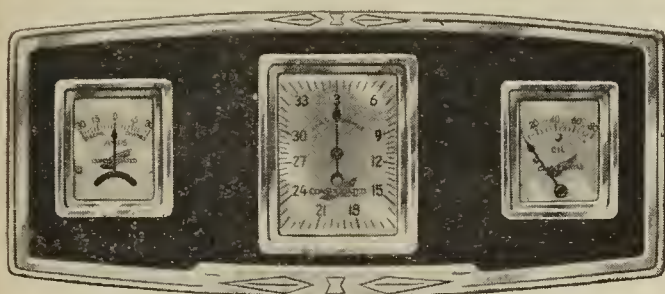
In the Consolidated Marine Instrument Panels illustrated below, the Pioneer Instrument Company offers a most complete line of standard marine panels. Consolidated panels contain from 2 to 8 instruments. In most panels several combinations of instruments are available to fulfill the individual requirements of all boat owners or builders.

These panels were designed especially for marine use. They are constructed entirely of brass and will withstand the effects of salt air without damage to their finish. Consolidated Marine Panels are richly finished with polished

chromium rim and bezels and a hard baked black enamel mat. They may be obtained in an all chrome satin finish, if desired. All panels are indirectly illuminated. This is a feature which is greatly appreciated when operating a boat at night, when artificial illumination is necessary.

Thermometers are standard with 6 feet of tubing; additional tubing can be supplied at **\$0.25** per foot Extra. Tachometer Shafting is of Brass and can be supplied for all Standard makes of Tachometers at **\$0.80** per foot, plus **\$2.75** per set for end fittings.

SEA CREST—3 INSTRUMENTS



Ammeter—Tachometer—Oil Pressure Gauge

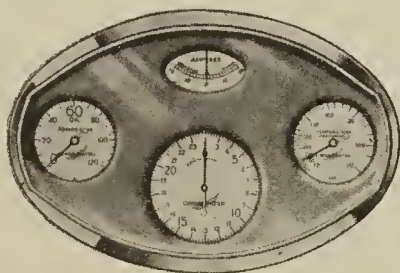
Indirectly illuminated.

Height, 3½ Inches—Length, 8½ Inches.

Each

Black with Chrome Rim and Bezel**\$40.00**All Chrome **45.00**

SKIPPER—4 INSTRUMENTS

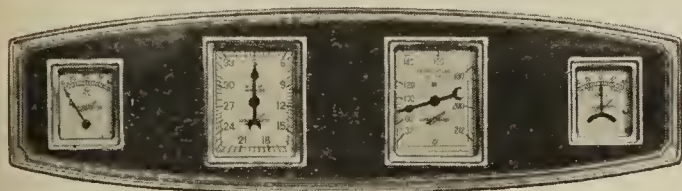
Ammeter—Tachometer—Oil Pressure Gauge
Thermometer

Indirectly illuminated—Mounts from rear.

Height, 5½ Inches—Length, 8 Inches.

Finish—Dull Silver or Gold Mat Finish with Brass Each
or Nickel plated Rim.....**\$45.00**

BEACON—4 INSTRUMENTS

Ammeter—Tachometer—Oil Pressure Gauge
Thermometer

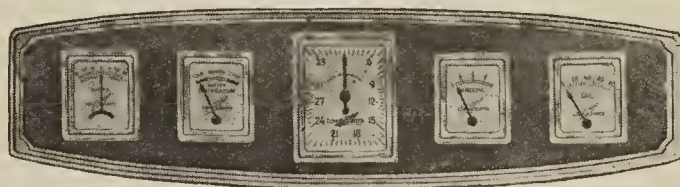
Indirectly illuminated.

Height, 3½ Inches—Length, 13¼ Inches.

Each

Black with Chrome Rim and Bezel.....**\$50.00**All Chrome **55.00**

DOLPHIN—5 INSTRUMENTS

Ammeter—Tachometer—Thermometer—Oil Pressure
Gauge—Electric Gas Gauge

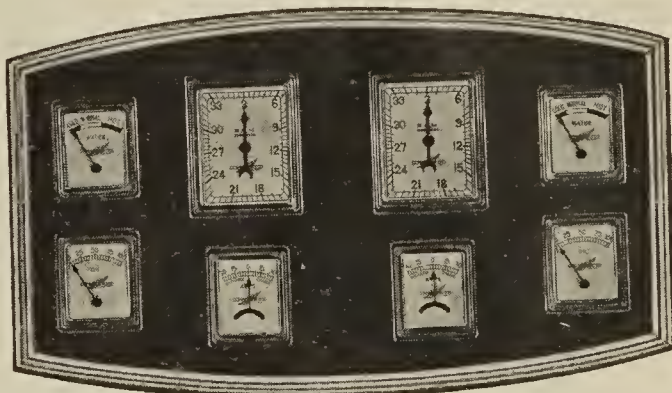
Indirectly illuminated.

Height, 3¾ Inches—Length, 13½ Inches.

Each

Black with Chrome Rim and Bezel.....**\$55.00**All Chrome Finish **60.00**

SEA GULL—8 INSTRUMENTS

Two Each—Ammeters—Tachometers—Thermometers
Oil Pressure Gauges

Indirectly illuminated.

Height, 7¾ Inches—Length, 12½ Inches.

Each

Black with Chrome Rim and Bezel**\$140.00**All Chrome Finish **150.00**

IGNITION SWITCH LOCKS

SESAMEE

No. 580RM



10,000 possible combinations, yet only the owner's secret, easily remembered, combination will unlock it. Can be easily operated in the dark.

Made of rust and corrosion resisting materials throughout. Cannot be picked by feel or sound.

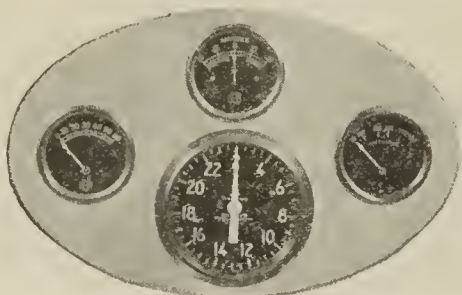
No key to lose overboard—to remember or forget.

Combination can be changed at any time, but only by the owner who knows the prevailing combination.

Complete, Ready to Install With 24-Inch Length Each
Flexible Metal Covered Wire for Connecting.....**\$7.50**

JONES TACHOMETERS

INSTRUMENT PANEL



This panel for Marine engines incorporates all of the latest features to assure safe, efficient and enjoyable Motor Boating. The panel includes: ammeter, oil pressure gauge, heat indicator and the well known Jones Tachometer, all placed on an artistic, beautifully arranged, attractive brass panel. All outside parts are made of brass, and the instruments are sealed to exclude the admission of moisture or salt water into the mechanism.

The panel is so constructed that the hole to be made in the dash need not be bored to accurate dimensions as the panel is placed into the dash through the front and drawn up snugly by U clamps.

Tachometer is designed to register instantaneously and continuously the velocity and fluctuation of rotation, and is precision built, not only to give reliable, accurate and positive information at a glance, but it does it quietly, smoothly and without vibration.

When ordering specify (a) Dial range desired i.e. 200-2400 or 200-4000 R.P.M., etc. (b) length of flexible shafting, (c) whether attached to crankshaft or camshaft.

Type "A" Panel—(Unlighted) Including Ammeter, Oil Pressure Gauge, Heat Indicator with 10 Ft. Tubing and Jones Tachometer.....

Type "B"—Same As Above, But Lighted.....

Shafting First Four Feet.....

Additional Per Foot

BATTERY SWITCH

PIONEER—CONSOLIDATED

This ignition lock switch is neat in appearance and prevents the unauthorized starting of any engine on which it is installed. Is equipped with two Yale type keys. The mounting diameter is 1 inch and the overall diameter of the face is 1½ inches. Will mount on bulkheads up to ½-inch thick.

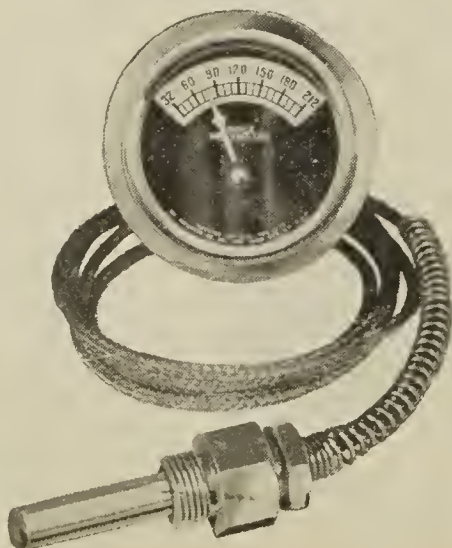
Type "C" Lock Switch, Two Keys.....

MOTOR METERS

BOYCE—MARINE TYPE—MODEL H

A very reliable indicator to check the temperature of the cooling system. Can be inserted in a 2½ inch diameter hole and held in place by a clamp in the back. Furnished with ⅝-inch S.A.E. or ½-inch stand connections.

| Length of Tubing, Feet | Wgt. Each, Lbs. | Each |
|------------------------|-----------------|---------|
| 5 | ¾ | \$10.00 |
| 10 | 7/8 | 11.25 |
| 15 | 1 1/8 | 12.50 |
| 20 | 1 1/4 | 13.75 |



Note—On ordering specify which connection desired.

OIL PRESSURE GAUGES

AC—FOR INDIVIDUAL MOUNTING

Will withstand a 200 percent overload. Pinion and driving sector teeth and bearings cut to watch movement accuracy. Black brass, case and dial and white figures. Furnished in 0 to 50 and 0 to 100 pound ranges. Measures 2¾ inches over flange, 1¾ inches deep and requires a 2½ inch in an instrument board. Rust proof screws or bolts furnished.

No. 239—Weight Each, ¼ Lb.\$1.50



AMMETERS

AC—FOR INDIVIDUAL MOUNTING

Particularly designed to withstand overloads, vibration and moisture. Range, 20-0-20. Simplified design; black case with black dial and white figures. Diameter over flange, 2¾ inches; requires 2½ inch dash or screws furnished.

No. 238—Wgt. Ea., 3 Ozs. \$1.50

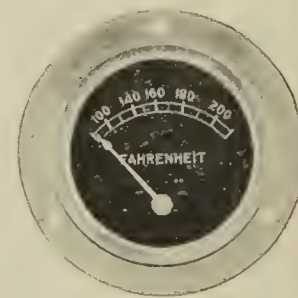


THERMO GAUGES

AC—FOR INDIVIDUAL MOUNTING

Calibrated to indicate accurately, motor cooling water temperatures. Furnished with twelve feet of capillary tube and water jacket adapter. Furnished in two diameters, 3¼ and 2¾ inches overall flanges; depth, 1½ inches. Black case and dial. Rustproof attaching bolts or screws furnished.

No. 240—Weight Each, ¼ Lb.\$5.00



ELECTRIC GAS GAUGE

PIONEER—CONSOLIDATED

These gas gauges are essentially current balancing instruments, being in their accuracy completely independent of changes of battery voltage. When ordering supply dimensional drawings of tanks, showing location of baffle plates. The case of this instrument is 2 inches in diameter, and is 1⅞ inches deep. The part of the tank unit which mounts on top of the tank is 1¼ inches high; 3⅜ inches long and 2 inches wide. Wiring diagrams are supplied with each instrument. Specify whether for a 6 or 12 volt system.

Complete With Tank Unit in All Standard Mountings.....

Add for Original Calibration

If stock calibrations can be used, no calibration charge will be made.



THERMOMETERS

PIONEER—CONSOLIDATED

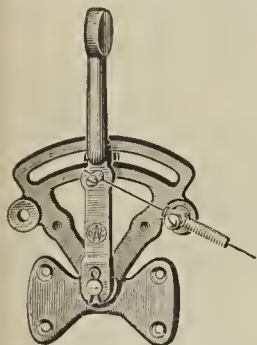
These thermometers are made to indicate the temperature of either the lubricating oil or the water in the circulating system of an engine. The case measures 1¾ inches in diameter and is available in either screw or clamp flange mountings, in either black enamel or chromium finish.

| | Each | Each |
|---------------------------|--------|----------------------|
| 6 Foot Tube—Black Flange | \$6.00 | Chrome Flange \$6.50 |
| 12 Foot Tube—Black Flange | 7.50 | Chrome Flange 8.00 |
| 20 Foot Tube—Black Flange | 9.50 | Chrome Flange 10.00 |

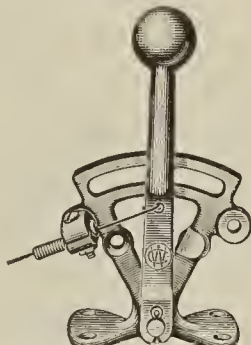


REMOTE THROTTLE CONTROLS

PLAIN BRASS



With Side Plate
Fig. 8757-E



With Floor Plate
Fig. 8757-F

When turning a Buoy the driver can hold to the side of his boat—hook his thumb around the throttle handle and have perfect control at all times. Handle unpolished—not slippery, with large knob at the top for good hold.

Plate dimensions, 3 inches long by $1\frac{3}{4}$ inches wide, 4 screw holes. Lever, $4\frac{3}{4}$ inches overall. Weight, $5\frac{1}{4}$ ozs.

Each
Plain Brass with Side Plate, No. 8757-E.....\$1.75
Plain Brass with Floor Plate, No. 8757-F..... 1.75

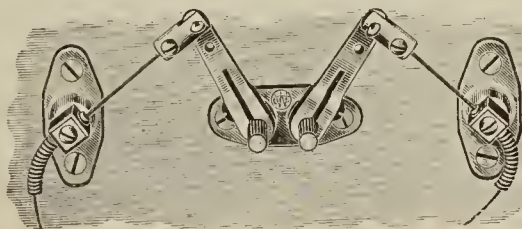
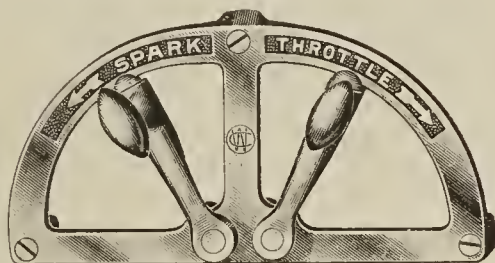
SPARK AND THROTTLE CONTROLS

FOR USE WITH BOWDEN WIRE

BULKHEAD
FRICTION
TYPE

Sets close to the bulkhead and out of the way. Control levers are a mply long move smoothly, but stay positively where placed. Arms and rod connecting levers are knurled so that levers cannot slip. Arms are supplied fitted with sockets which operate connecting rods in a vertical position. The arms and connecting rods are placed inside clips tapped $\frac{1}{4}$ inch U.S.S. (For bracket clamps see page 142.)

No. 6 Made to use with Rod—No. 7 used with Bowden Cable and includes Bracket Clamps.



Rear View of No. 7

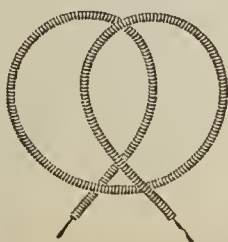
No. 6—Weight Each, 1 Lb.\$4.75
No. 7—Weight Each, $1\frac{1}{4}$ Lbs..... 6.00

FLEXIBLE BOWDEN WIRE AND CASING

FOR REMOTE CONTROLS AND OUTBOARD STEERERS

A strong and stiff (but at the same time flexible) wire and casing for Remote Control hook-ups. Solid brass throughout.

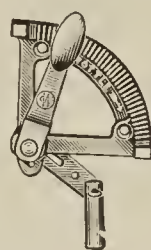
Per Foot
 $\frac{3}{8}$ In. O.D. Tubing.....\$0.20
 $\frac{1}{4}$ In. O.D. Tubing..... .25
Wire Only10



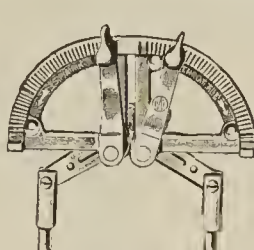
SPARK AND THROTTLE CONTROLS

BULKHEAD TYPE
HEAVY DUTY

Extra heavy design for use on cruisers, small yachts, yawls, etc.; made entirely of brass and nicely finished throughout; control levers are designed with neatly finished finger grips, each lever has a plunger



No. 8756



No. 8753

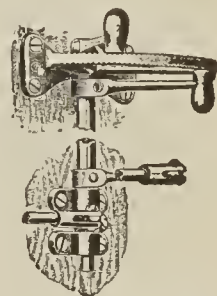
er with brass spring which engages in teeth on quadrant; lever arms are $3\frac{1}{2}$ inches overall; each lever is connected to a $\frac{3}{8}$ x3 inch brass rod that passes through bulkhead, where the end of which is provided with $2\frac{1}{2}$ inch offset arm; these arms are split and designed with clamping screw so they can be adjusted to meet the requirements of any installation; each arm has a $\frac{1}{8}$ x $1\frac{1}{8}$ inch rod clip attached, the end of which is tapped with $\frac{1}{8}$ -18 thread for connecting control rods to. Quadrant has a $3\frac{1}{8}$ inch and is drilled with four holes for mounting screws.

| Nos | Description | Weight Each, Lbs. | Each |
|---------|--------------|-------------------|--------|
| 8753-4A | Light Double | 3 | \$4.75 |
| 8753-4B | Double | $3\frac{1}{2}$ | 5.50 |
| 8756-4C | Single | $1\frac{3}{4}$ | 2.75 |

Note—The double control is so designed that it can be cut in half, making two single controls.

HORIZONTAL TYPE

Particularly designed for bulkhead control when motor is placed under bridge deck; the tube is actuated by the lower lever and the rod inside the tube by the upper lever; levers at the bottom of the tube and rod may be clamped in any desired position; tubing and rod must be cut to length for each installation; made of brass and highly polished; levers have spring pawls which engage in teeth on quadrant; holes drilled in brackets for mounting; furnished without tubing or rod.

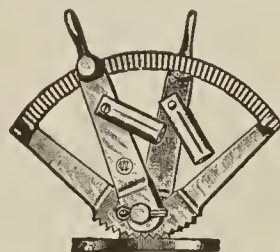


Each

No. 8751—Size No. 2—Projection, 3 Inches; Weight Each, $1\frac{1}{4}$ Lbs.
Brass Tubing or Rod. Extra per Foot.....
Brass Bracket for Rod or Tube, Extra, Ea.....
Price on application.

VERTICAL TYPE
WITH ADJUSTABLE BASE

The base of this control is adjustable and is provided with tooth arc which allows for any change in position of the quadrant that might be required. This is useful when it is desired to lead the connecting rods in a direction that is not parallel to the base or plate, and still allow full swing to the levers. This adjustment is easily made by loosening a single screw. All parts made of brass and highly polished. Plate has four screw holes for mounting to bulkhead. Lever arms have strong spring pawls which engage in teeth on quadrant.



| Size, Nos. | Description | Size Base, Inches | Projection, Inches | Weight Each, Lb. | Each |
|------------|-------------|---------------------------------|--------------------|------------------|--------|
| 5582 | Single | $2\frac{1}{4}$ x $1\frac{3}{8}$ | 4 | $\frac{1}{2}$ | \$2.50 |
| 5583 | Double | $2\frac{1}{4}$ x $1\frac{3}{8}$ | 4 | $\frac{5}{8}$ | 3.75 |

FRONT BRACKETS FOR CONTROLS

This bracket is interchangeable with the plate shown with the No. 5583 single or double control; made of cast brass; provides means for locking quadrant in any desired position so as to allow full swing of levers.



| Nos. | Description | Weight Each, Ounces | Each |
|------|-----------------------------------|---------------------|--------|
| 5584 | Single Control With Front Bracket | 11 | \$3.25 |
| 5585 | Double Control With Front Bracket | 13 | 4.50 |
| 5586 | Bracket, Only | 5 | 1.00 |



COLUMN SPARK AND THROTTLE CONTROL

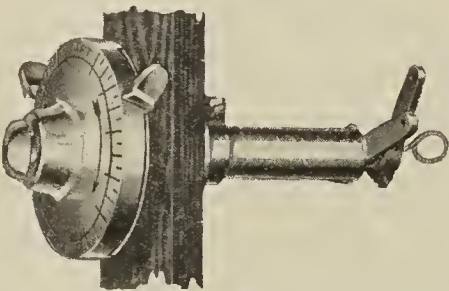
CRUISER TYPE

All bronze; machined throughout. Bracket, control arms and deck flange adjustable. Calibrated dial, spark and throttle handles, and signal button, polished bronze. Standard height column, 48 inches, furnished unless otherwise specified. Additional charge for extra length.

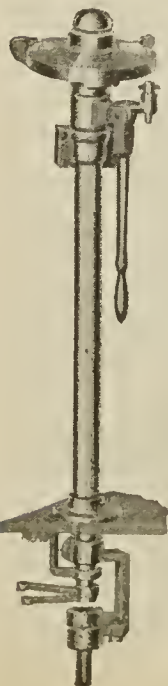
| | |
|----------------------------------|---------|
| No. 1701—Column Diameter | Each |
| 1 1/4 Inches; Weight 11 Lbs..... | \$14.00 |
| Chromium Plated | 17.00 |

BULKHEAD SPARK AND THROTTLE CONTROL

All bronze heavily constructed, machined throughout and highly finished. Control handles and quadrant are same type as those on column control. Can be installed in either a vertical or horizontal position. Control arms adjustable to any angle perpendicular to tube. Tube which extends through bulkhead is 3 inches in depth from base of flange. Longer tube furnished at small additional charge.



| | |
|--|---------|
| No. 1702—Column Diameter, 1 1/4 Inches; Weight 5 Lbs. | Each |
| ..... | \$11.00 |
| Chromium Plated | 12.50 |



SPARK, THROTTLE AND CLUTCH LEVERS

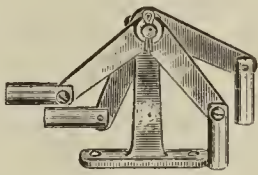
A combination that will save valuable deck space. Gives centralized control of engine. Bracket adjustable. Clutch lever hinged and fitted with wing screw so lever can be made stationary in horizontal position. Made entirely of bronze and brass. Machined and highly finished throughout. Standard height from deck to top of controls, 42 inches. Additional charge for longer lengths.

| | |
|--|---------|
| No. 1720—Column Diameter, 1 5/8 Inches; Weight 31 Lbs..... | Each |
| ..... | \$45.00 |
| Chromium Plated | 52.50 |

CONTROL CRANKS

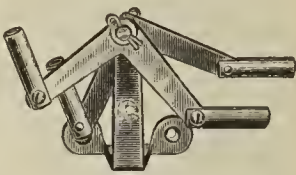
PLAIN BRASS—WITH SOLID CRANKS

Upright



No. O-B, Fig. 876

Side



No. O-D, Fig. 877

The cranks are solid with a fixed angle of 90 degrees. They are either single or double as desired. Nos. O-F to O-K are extra heavy.

| Nos. | Rod Clips Tapped | Weight, Each | Each |
|------|--------------------------|--------------|--------|
| O-A | 1/4 in. Single, Upright | 5 oz. | \$1.10 |
| O-B | 1/4 in. Double, Upright | 7 oz. | 1.75 |
| O-C | 1/4 in. Single, Side | 4 oz. | 1.10 |
| O-D | 1/4 in. Double, Side | 7 oz. | 1.75 |
| O-F | 5/16 in. Single, Upright | 7 oz. | 1.35 |
| O-G | 5/16 in. Double, Upright | 10 oz. | 2.25 |
| O-H | 5/16 in. Single, Side | 7 oz. | 1.35 |
| O-K | 5/16 in. Double, Side | 11 oz. | 2.25 |

| | |
|---|--------|
| Crank Only—For OA to OD Cranks..... | \$0.35 |
| Bracket Only—For OA to OD Cranks..... | .40 |
| Rod Clips Only—For OA to OD Cranks..... | .20 |
| Crank Only—For OF to OK Cranks..... | .40 |
| Bracket Only—For OA to OD Cranks..... | .50 |
| Rod Clips Only—For OA to OD Cranks..... | .25 |

DASH CONTROLS



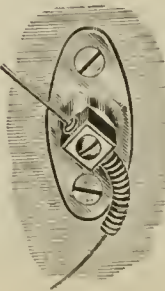
STRAIGHT TYPE

Strong enough to operate any device. Requires only a 7/8 inch hole in dash or bulkhead. Consists of a polished aluminum and brass head with 7/8 inch knob with concealed brass spring automatically returns dash knob when hand pressure is released. Has 3/8 inch flexible brass tubing with 16 gauge spring brass control wire. Has 1 1/2 inch aluminum dash plate.

| Nos. | Length, Feet | Weight Each, Ozs. | Each |
|-------|--------------|-------------------|--------|
| R-04 | 6 | 6 | \$1.75 |
| R-04L | 19 | 13 | 3.75 |

BOWDEN CASING BRACKET CLAMPS

PLAIN BRASS

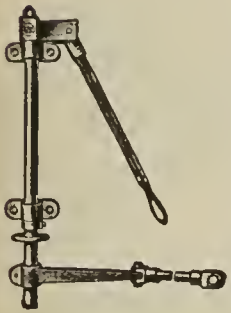


These Clamps are for use with a Bowden Wire and Casing "hook-up." The Bowden Casing Bracket Clamp as illustrated above includes the small base part for attachment to the bulkhead, and the special Swivel Bracket Clamp for holding the Bowden Casing. Being of Swivel design the Special Bracket Clamp keeps the Casing from cramping, and insures smooth and easy action.

| | |
|---|-------------|
| Bowden Casing Bracket Clamps Only | Each \$0.50 |
|---|-------------|

REVERSE CONTROLS

No. 8759—IMPROVED



Suitable for largest craft under 1 man control; for handling the reverse gear from pilot house or bridge deck; vertical shaft is fastened to bulkhead by means of brackets; upper handle, 18 inches long, is hinged, and when not in use, hangs out of the way; lower lever has 9 inches throw; shackle end with $\frac{3}{4}$ -inch socket; all polished brass, except lower lever, which is galvanized iron; with $1\frac{1}{8}$ inch galvanized steel or Tobin bronze shaft as ordered.

Per Set

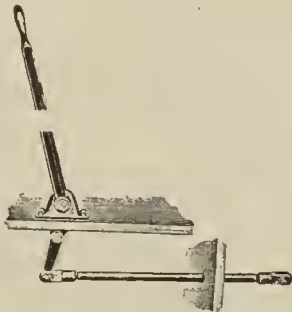
| | |
|--|---------|
| Fittings only, without shaft | \$20.00 |
| Fittings with 4 feet of steel shaft..... | 25.00 |
| Fittings with 4 feet of bronze shaft | 28.00 |

Per Foot

| | |
|--------------------------------|--------|
| Additional shaft, steel | \$0.75 |
| Additional shaft, bronze | 1.50 |

RITEWAY

Lever is operated in the direction it is desired to go. This action eliminates possible confusion to the helmsman in tight places. Brass segment gear construction permits this action and also insures easy operation of heavy type reverse gears. Made of brass throughout with exposed parts highly polished. Housing is water-tight, water cannot run through into hull. Set consists of an H section, 31-inch handle, housing with gears, lower lever, 6 inches center to center of holes and two connecting jaws or shackles which are threaded to take 12-inch pipe.



No. 903—Weight Each, 13 Lbs.....\$22.50

TROJAN

Simple, heavy duty control with wrought brass lever, $\frac{1}{2}$ x2 inches by 37 inches long, from center of hinge pin to top; makes gear shifting easy work. Set consists of handle, 7x2 $\frac{7}{8}$ inch floor plate and two connecting jaws and shackles. Handle extends 14 $\frac{1}{2}$ inches below center of floor plate pin to bottom. All brass construction with exposed parts polished.

No. 904—Wgt. Ea., 20 Lbs.

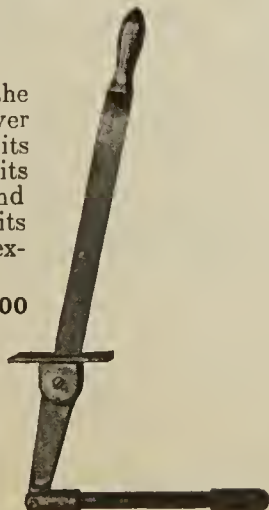
Price on application.



ENGINE CLUTCH CONTROLS

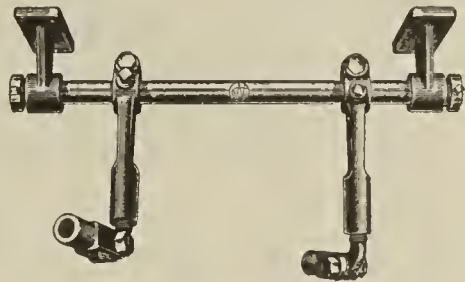
This control is used largely in the cock-pits of auxiliaries. The lever may be readily withdrawn from its socket and a flush plate put in its place. All parts are bronze and nicely polished. Split socket permits ready attachment to clutch rod extension. Lever, 30 inches.

No. 224—Wgt. Ea., 11 Lbs. \$12.00



JACK SHAFT FITTINGS

FOR USE WITH REVERSE CONTROLS AND ROPELESS STEERERS



Fittings Assembled to Make Complete Jack Shaft

When installing reverse controls and ropeless steerers, they eliminate necessity of bending pipe to many different angles when obstructions are in direct line of hook-up. One inch diameter brass rod should be used for the shaft. The illustration shows a normal assembly of the various parts, individually illustrated and listed below, to make a complete jack shaft. All parts are plain cast brass.

SEPARATE FITTINGS

LEVERS



No. 1



No. 3

These levers can be used also for rudder tiller arms for ropeless steerer installations. The threaded gooseneck end on No. 1 lever eliminates binding under working conditions and gives an adjustable feature—so that pipe can be lead to it at any angle. Both levers are 10 inches overall and 8 inches center to center of holes; have 1 inch shaft and $\frac{1}{2}$ inch bolt holes; No. 1 lever is also extensible for about $1\frac{1}{4}$ inches.

No. 1—Weight Each, 2 $\frac{3}{4}$ Lbs.\$4.00No. 3—Weight Each, 2 $\frac{3}{4}$ Lbs. 3.00

HANGERS



Measure 3 $\frac{3}{8}$ inches in height and have a 5 $\frac{1}{2}$ x2 inch base; 1 inch shaft opening and drilled for $\frac{5}{8}$ inch fastenings.

No. 2—Weight Each, 2 $\frac{1}{4}$ Lbs.....\$2.00

CONNECTING YOKES OR SOCKETS

Are tapped for $\frac{1}{2}$ inch pipe; length overall, 3 $\frac{3}{4}$ inches; fitted with $\frac{1}{2}$ inch bolt.

No. 4—Weight Each, 1 Lb...\$1.00



SHAFT COLLARS



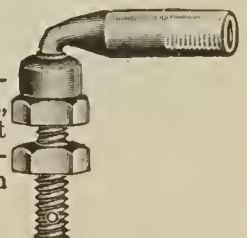
Have hole for 1 inch shaft and are fitted with set screw. Outside diameter, 1 $\frac{1}{8}$ inches.

No. 5—Weight Each, 3 Ozs.....\$0.50

BALL JOINTS

BRASS

Used for carburetor and timer controls on automobiles, motor boats, etc., or anywhere a flexible right angle joint is required. Machined to perfect dimensions and furnished complete with connecting nut.



Each

Ball Joints—Size Thread, $\frac{1}{4}$ Inch; Number of Threads per Inch, 20; Weight per Hundred, 2 $\frac{1}{2}$ Lbs. \$0.18

KIMBALL CONTROLS
PEDESTAL TYPE A



Furnished in right and left hand for twin screw installation. Made entirely of bronze and highly polished. This control may be cut down to give any desired height as low as 28 inches without any additional charge. When installing this control it will be necessary to disassemble the Control Head, removing the connecting link which has $\frac{1}{8}$ -16 S.A.E. thread. To this you connect the draglink tube; this tube should be $\frac{7}{8}$ inch O.D. 11 Stubs Gauge, seamless steel or hard brass tubing. The throttle and spark control links should be made of $\frac{1}{2}$ inch brass rod, and have a slight offset at the upper end.

Overall Height, 44 Inches.
Net Weight, 35 Lbs.

| | |
|---|----------|
| | Each |
| Brass, Polished | \$110.00 |
| Nickel Plated | 120.00 |
| Chromium Plated | 126.00 |
| For Other Types Not Listed, Prices Upon Application | |

SHELF TYPE C

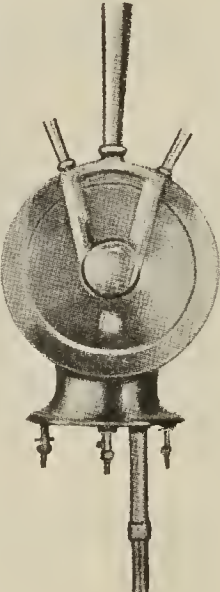
A complete engine control, having spark, throttle and reverse gear control levers, also a push button to operate the magnetic starter switch.

This control may be furnished without the spark lever for engines having automatic spark control on certain Diesel Engines.

They are built in right and left hand for twin screw boats. From outward appearance no difference will be seen between right and left hand. However, they are furnished with right and left crankshafts, which gives a uniform motion to the draglinks. This allows the installer to make up his installation below deck in duplicate, saving much time and expense on twin screw jobs.

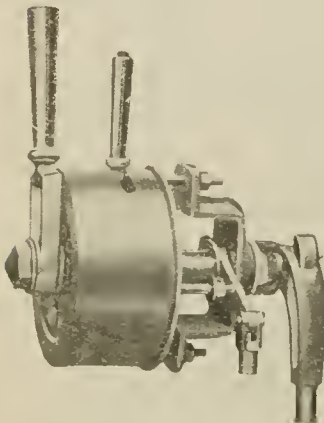
The vertical draglink running up to the control should be of $\frac{7}{8}$ inch O.D. tubing.

11 Stubs gauge seamless steel or hard brass tubing, threaded $\frac{1}{8}$ -16 S.A.E. on one end to fit the connecting links on the control. Throttle and spark control links should be made of $\frac{1}{2}$ inch brass rod, having slight offset at the upper end.



| | |
|-----------------------|---------|
| | Each |
| Brass, Polished | \$70.00 |
| Nickel Plated | 75.00 |
| Chromium Plated | 78.50 |

WHEELBOX TYPE D

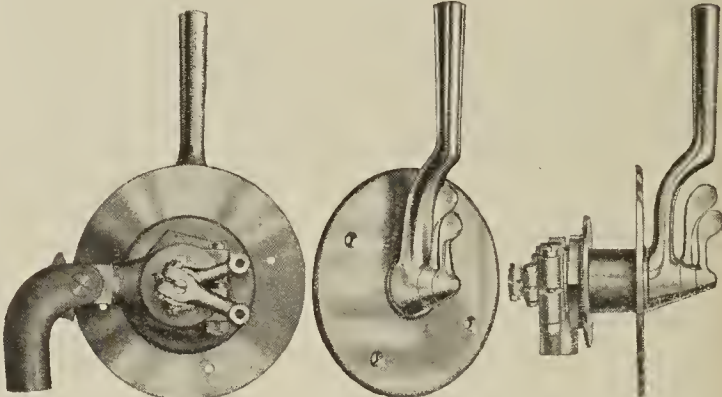


A reverse gear, spark and throttle control, designed to handle the average type gasoline engine. Furnished in right and left hand for twin screw boats.

This type is used on a number of stock boats as standard equipment. Size of connections same as above controls.

| | |
|-----------------------|---------|
| | Each |
| Brass Polished | \$60.00 |
| Nickel Plated | 64.00 |
| Chromium Plated | 66.50 |

UNIVERSAL CONTROLS
REVERSE WITH SPARK AND THROTTLE ATTACHED



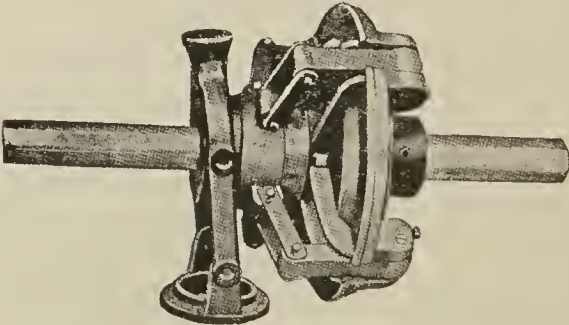
| | | |
|--------------------------------------|--------------------|---------------------------|
| Rear View | Front View | Side View |
| Size Plate 6 $\frac{7}{8}$ Inches | Handle 8 Inches | Plate to Back 4 Inches |

This assembly represents one of the most compact controls ever offered to the boating public—all bronze—the levers and handle are all cast integral with the shafts. With the special lever and link connection, very little pressure on the handle is necessary to engage or disengage the most difficult gear. This control may be placed on the bulkhead or wheel box.

A special double bell crank assembly with rigid arrangement to be used in connection with the sprocket and gas levers is furnished as part of the assembly.

| | |
|---|---------|
| | Each |
| Polished Bronze | \$31.00 |
| Chromium Plated | 35.00 |
| Polished Brass Without S. & T. Control | 17.75 |
| Chromium Plated Without S. & T. Control | 21.00 |

TOGGLE FRICTION CLUTCH



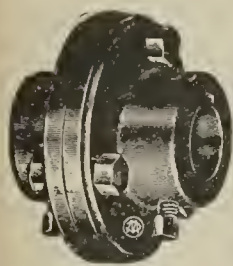
This clutch has been especially designed for heavy duty, combined with high speed purposes. A great many are using this clutch in connection with several types of aeroplane motors and similarly constructed types of engines, when power and durability are the prime factors.

These clutches are compact, durable, light in weight and consume little space. Positively reliable and guaranteed to stand the strain necessary for clutches used for these purposes.

When ordering be sure to specify size of engine shaft, propeller shaft and keyways desired. Also number of clutch.

| Minimum Operating Space on Shaft for Clutches | | | | | | |
|---|--------|-------------------------------|----------------------------|----------------------|-----------------------|---------|
| No. 2 | | 9 inches | | | | |
| No. 3 | | 10½ inches | | | | |
| No. 4 | | 12 inches | | | | |
| No. 5 | | 13 inches | | | | |
| | | Horse Power per 100 Rev. | Max. Size Propeller Inches | Average Weight, Lbs. | Price with Fibre Disc | |
| Diam., Nos. | Inches | Bore | | | | |
| 2 | 6 | ¾, ⅞, 1, 1 ⅛, 1 ¼ | 9 | 16 | 21 | \$13.35 |
| 3 | 9 | 1, 1 ⅛, 1 ¼, 1 ½, 1 ¾ | 18 | 22 | 40 | 18.90 |
| 4 | 12 | 1 ¼, 1 ½, 1 ¾, 2, 2 ⅛ | 24 | 26 | 75 | 27.75 |
| 5 | 15 | 1 ½, 1 ¾, 2, 2 ¼, 2 ½, 2 ¾, 3 | 30 | 32 | 90 | 38.90 |

FLANGE COUPLINGS

No. 882
CAST IRON

Accurately made and are interchangeable as to shaft size within the limits of each size of coupling. For example—a 1 inch and 1¼ inch shaft may be coupled by using a No. 2 male bored for one of those sizes and a No. 2 female bored for the other size. To join a 1½ inch and a 1¾ inch shaft a similar combination of the No. 13 coupling may be used.

Regular couplings are suitable for most marine engines. The heavy couplings are best for fishing and other work boats having heavy duty engines and where great strength is desirable. Each coupling is fitted with standard key way and set screws.

| Size, Nos. | Shaft Size, Inches | Length Overall, Inches | Diam. Flange, Inches | Thickness of Flange, Inches | Weight Each, Lbs. | Each |
|------------|--|------------------------|----------------------|-----------------------------|-------------------|--------|
| *1 | ¾, 7/8 & 1 | 3 ¾ | 4 | 7/8 | 5 | \$2.80 |
| *2 | ¾, 7/8, 1, 1 1/8, 1 1/4, 1 3/8 & 1 1/2 | 4 | 4 1/2 | 1 | 6 1/2 | 3.40 |
| 3 | ¾, 7/8, 1, 1 1/8, 1 1/4, 1 3/8 & 1 1/2 | 4 1/2 | 5 | 1 | 8 | 4.10 |

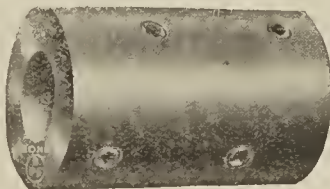
Heavy Couplings

| | | | | | | |
|-----|--|-------|-------|-------|--------|--------|
| 12 | 1, 1 1/8 & 1 1/4 | 5 | 5 | 1 1/4 | 10 | \$4.50 |
| *13 | 1, 1 1/8, 1 1/4, 1 3/8, 1 1/2, 1 5/8, 1 3/4, 1 7/8 & 2 | 5 1/2 | 5 1/2 | 1 1/4 | 12 1/2 | 5.50 |
| 14 | 1 1/4, 1 3/8, 1 1/2, 1 5/8, 1 3/4, 1 7/8 & 2 | 6 1/4 | 6 | 1 3/8 | 17 1/2 | 6.75 |

Note—In ordering be sure to give number and shaft size wanted. *Nos. 1-2-13 in stock.

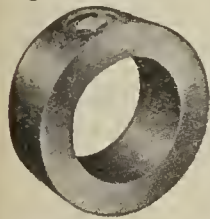
SOLID SLEEVE COUPLINGS

For light drives at high speed. Machine finish. Furnished with hollow set screws and wrench. Machined all over.



| Size Shaft, Inches | Length, Inches | Outside Diameter, Inches | Each | Size Shaft, Inches | Length, Inches | Outside Diameter, Inches | Each |
|--------------------|----------------|--------------------------|--------|--------------------|----------------|--------------------------|--------|
| ¾-1 | 3 ¾ | 2 1/2 | \$3.00 | 1 1/2 | 5 1/4 | 3 1/8 | \$4.00 |
| 1 1/8-1 1/4 | 4 1/2 | 2 7/8 | 3.20 | 2 | 6 3/4 | 4 | 5.50 |

Note—For reducing couplings, add 20 per cent to the larger bore.



SAFETY SHAFT COLLARS

SOLID

Both faces are machined and the edges carefully rounded. Countersunk also for a low head set screw to assure safety.

| Shaft Size, Inch | Each | Shaft Size, Inches | Each | Shaft Size, Inches | Each |
|------------------|--------|--------------------|--------|--------------------|--------|
| 1/2 | \$0.40 | 1 | \$0.45 | 1 1/2 | \$0.65 |
| 5/8 | .40 | 1 1/8 | .50 | 1 5/8 | .75 |
| 3/4 | .40 | 1 1/4 | .55 | 1 3/4 | .80 |
| 7/8 | .40 | 1 3/8 | .60 | 2 | .90 |

REAR BEARINGS



BABBITTED

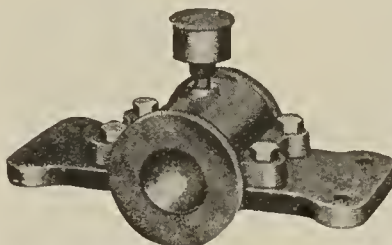
A good long span bearing to help eliminate vibration on shaft lines.

| Bore, Inches | Wide Long, Inches | Length of Bearing, Inches | Price |
|----------------|-------------------|---------------------------|--------|
| 5/8 to 1 | 2 3/4 x 16 | 3 | \$4.50 |
| 1 1/8 to 1 7/8 | 3 1/2 x 22 | 4 | 6.00 |
| 1 1/2 to 2 | 4 x 24 | 5 | 8.25 |
| 2 1/8 to 2 3/4 | 5 x 27 | 6 | 10.00 |

INTERMEDIATE BEARINGS

LIST

Necessary when long shafts and universal joints are used. Cast iron babbitted journal. With grease cup; ends are faced.



| Size Shaft, Inches | Length Overall, Inches | Length Bearing, Inches | Each | Size Shaft, Inches | Length Overall, Inches | Length Bearing, Inches | Each |
|--------------------|------------------------|------------------------|--------|--------------------|------------------------|------------------------|--------|
| 5/8 | 7 1/2 | 2 7/8 | \$2.80 | 1 3/8 | 8 1/2 | 3 3/4 | \$4.25 |
| 3/4 | 7 1/2 | 2 7/8 | 3.05 | 1 1/2 | 8 1/2 | 3 3/4 | 4.50 |
| 7/8 | 7 1/2 | 2 7/8 | 3.20 | 1 5/8 | 8 3/4 | 3 7/8 | 4.75 |
| 1 | 7 1/2 | 2 7/8 | 3.35 | 1 3/4 | 8 3/4 | 3 7/8 | 5.00 |
| 1 1/8 | 7 3/4 | 3 1/8 | 3.60 | 1 7/8 | 9 1/8 | 4 3/8 | 5.30 |
| 1 1/4 | 7 3/4 | 3 1/8 | 4.00 | 2 | 9 1/8 | 4 3/8 | 5.55 |

FLAT BOXES

Standard type, made of cast iron babbitted, threaded on top for grease cup.

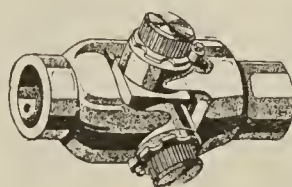


| Shaft Size, Inches | Base, Inches | Each | Shaft Size, Inches | Base, Inches | Each |
|--------------------|---------------|--------|--------------------|---------------|--------|
| 3/4 | 1 5/8 x 6 1/2 | \$1.00 | 1 3/8 | 2 1/4 x 8 | \$1.60 |
| 7/8 | 1 5/8 x 6 1/2 | 1.00 | 1 1/2 | 2 1/4 x 8 | 1.65 |
| 1 | 1 5/8 x 6 1/2 | 1.00 | 1 5/8 | 2 1/8 x 8 5/8 | 2.20 |
| 1 1/8 | 1 7/8 x 7 1/4 | 1.35 | 1 3/4 | 2 1/8 x 8 5/8 | 2.20 |
| 1 1/4 | 1 7/8 x 7 1/4 | 1.35 | 1 7/8 | 2 3/4 x 9 3/8 | 2.90 |
| ... | ... | ... | 2 | 2 3/4 x 9 3/8 | 2.90 |

Larger Sizes and Heavier Types to Order

UNIVERSAL JOINTS

BLOOD BROS.



A rugged and compact universal joint; yokes are of drop forged steel; all working parts are hardened and ground. Has a larger bearing and will turn in a smaller circle than the usual. The entire joint is easily lubricated through a single opening. Will not throw oil and requires infrequent lubrication; takes heavy oil or soft cup grease; has interchangeability of repair parts. Made in four sizes, covering the usual range of marine requirements for angles up to 10 degrees. If angle of operation is over 10 degrees furnish the following data: (a) engine make, model, bore, stroke and number of cylinders and cycles.

(b) The rated speed and horsepower of the engine.

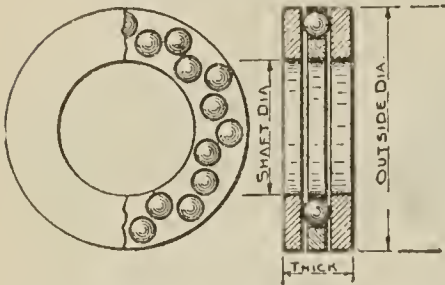
(c) The average operating speed of the joint in R.P.M.

(d) The approximate angle at which the joint will operate.

| Size, Nos. | Maximum Shaft Diam., Inches | Length of Single Joint, Inches | Diameter of Clearance Circle, Inches | Each |
|------------|-----------------------------|--------------------------------|--------------------------------------|---------|
| B1 | 1 1/4 | 7 1/2 | 5 1/4 | \$10.40 |
| B2 | 1 1/2 | 7 1/2 | 5 3/8 | 14.00 |
| B3 | 1 7/8 | 8 1/2 | 6 3/8 | 17.80 |
| B4 | 2 | 10 1/2 | 7 3/8 | 21.80 |
| B5 | 2 1/8 | 13 1/4 | 7 3/8 | 32.80 |
| B6 | 2 5/8 | 13 1/4 | 7 3/8 | 65.00 |

Note: Joints can be furnished with hubs of yokes turned, faced and centered but not bored. Joints will be equipped with set screws without extra charge, if desired. Stock sizes: B1, B2, B3, B5. No. B5 is made with cast steel yokes.

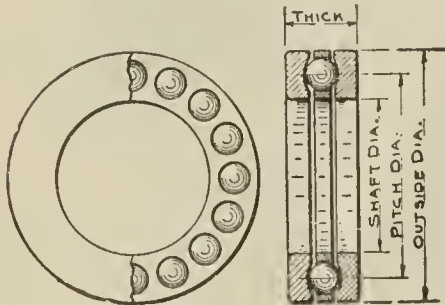
THRUST BALL BEARINGS



STANDARD

Consists of bronze retainers, holding the hardened steel balls, which rotate between the converted steel collars. Used for taking up the thrust of a propeller and all similar work.

| Diameter Shaft, Inches | Outside Diameter, Inches | Thickness, Inch | Diameter Ball, Inch | Numbers of Ball | Each |
|------------------------|--------------------------|-----------------|---------------------|-----------------|--------|
| 1/2 | 1 7/8 | 9/16 | 3/16 | 12 | \$1.25 |
| 5/8 | 1 11/16 | 9/16 | 3/16 | 13 | 1.35 |
| 3/4 | 1 13/8 | 1 1/8 | 3/16 | 14 | 1.40 |
| 7/8 | 1 3/2 | 5/8 | 1/4 | 14 | 1.45 |
| 1 | 1 5/8 | 5/8 | 1/4 | 15 | 1.50 |
| 1 1/8 | 2 3/8 | 5/8 | 1/4 | 16 | 1.65 |
| 1 1/4 | 2 11/8 | 5/8 | 1/4 | 18 | 1.75 |
| 1 3/8 | 2 3/4 | 5/8 | 1/4 | 20 | 2.00 |
| 1 1/2 | 2 5/4 | 5/8 | 1/4 | 20 | 2.25 |
| 1 5/8 | 2 3/2 | 1 1/8 | 5/16 | 20 | 2.75 |
| 1 3/4 | 3 3/2 | 1 1/8 | 5/16 | 20 | 3.00 |
| 1 7/8 | 3 1/2 | 1 1/8 | 5/16 | 22 | 3.50 |
| 2 | 3 3/4 | 1 1/8 | 5/16 | 23 | 3.75 |

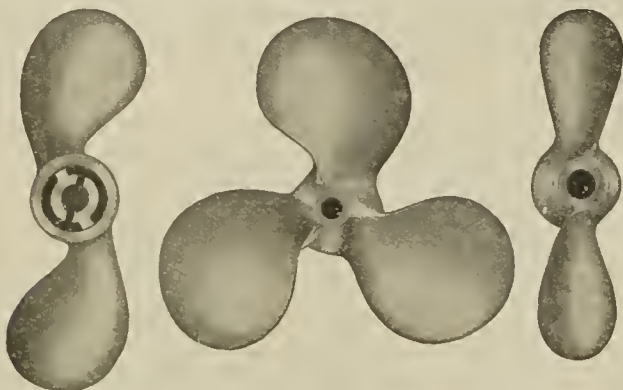


GROOVED TYPE

Used for taking up the thrust of a propeller and all similar work. Consists of pressed steel retainers, holding the hardened steel balls, which rotate between the converted steel collars.

| Diameter Shaft, Inches | Outside Diameter, Inches | Thickness, Inches | Diameter Ball, Inch | Number of Balls | Each |
|------------------------|--------------------------|-------------------|---------------------|-----------------|--------|
| 1/2 | 1 7/8 | 5/8 | 1/4 | 9 | \$1.20 |
| 5/8 | 1 9/8 | 5/8 | 1/4 | 10 | 1.30 |
| 3/4 | 1 11/8 | 5/8 | 1/4 | 12 | 1.40 |
| 7/8 | 1 13/8 | 3/4 | 5/16 | 11 | 1.50 |
| 1 | 2 1/8 | 3/4 | 5/16 | 12 | 1.60 |
| 1 1/8 | 2 3/8 | 3/4 | 5/16 | 13 | 1.70 |
| 1 1/4 | 2 5/8 | 3/4 | 5/16 | 14 | 1.80 |
| 1 3/8 | 2 7/8 | 3/4 | 5/16 | 14 | 2.00 |
| 1 1/2 | 2 9/8 | 3/4 | 5/16 | 16 | 2.40 |
| 1 5/8 | 2 11/8 | 7/8 | 3/8 | 15 | 2.70 |
| 1 3/4 | 2 13/8 | 7/8 | 3/8 | 16 | 2.90 |
| 1 7/8 | 3 1/8 | 7/8 | 3/8 | 16 | 3.40 |
| 2 | 3 1/4 | 7/8 | 3/8 | 17 | 3.50 |

OUTBOARD MOTOR PROPELLERS



Propellers for all makes of outboard motors carried in stock, also Special Racing Propellers.

Prices on Application

STOCK RUNABOUT and CRUISER PROPELLERS CARRIED IN STOCK—BORED and KEYED—READY FOR INSTALLATION

PROPELLERS



HYDE and COLUMBIAN TWO and THREE BLADE MANGANESE BRONZE



Two and three blade propellers furnished straight or taper bored to order. Price list covers standard type propellers.

| Diameter, Inches | Two-Blade | Three-Blade | Extra Bored and Key Seated |
|------------------|-----------|-------------|----------------------------|
| 8 | \$4.50 | \$6.50 | \$1.40 |
| 9 | 4.75 | 7.25 | 1.40 |
| 10 | 5.00 | 8.00 | 1.40 |
| 11 | 5.50 | 8.50 | 1.50 |
| 12 | 6.50 | 9.50 | 1.70 |
| 13 | 7.50 | 10.00 | 1.80 |
| 14 | 8.50 | 11.00 | 1.90 |
| 15 | 9.50 | 12.00 | 2.20 |
| 16 | 11.00 | 14.00 | 2.20 |
| 17 | 11.50 | 15.00 | 2.50 |
| 18 | 12.00 | 16.00 | 2.50 |
| 19 | 14.50 | 19.50 | 2.75 |
| 20 | 17.00 | 23.00 | 2.75 |
| 21 | 18.50 | 27.50 | 3.10 |
| 22 | 20.00 | 32.00 | 3.10 |
| 23 | 22.00 | 35.50 | 3.50 |
| 24 | 24.00 | 39.00 | 3.50 |
| 25 | 27.00 | 42.50 | 4.00 |
| 26 | 30.00 | 46.00 | 4.00 |
| 27 | 34.00 | 51.50 | 4.60 |
| 28 | 38.00 | 57.00 | 4.60 |
| 30 | 46.50 | 62.00 | 5.10 |
| 32 | 52.00 | 70.00 | 5.80 |
| 33 | 56.00 | 75.00 | 7.00 |
| 34 | 59.00 | 79.00 | 7.00 |
| 35 | 62.50 | 83.50 | 8.00 |
| 36 | 65.00 | 87.00 | 8.00 |
| 38 | 80.00 | 104.00 | 9.40 |
| 40 | 100.00 | 134.00 | 10.70 |
| 42 | .... | 144.00 | 13.50 |
| 44 | .... | 168.00 | 14.75 |
| 46 | .... | 200.00 | 16.00 |
| 48 | .... | 235.00 | 20.00 |
| 50 | .... | 300.00 | 26.00 |

RECONDITIONING AND ADJUSTING ALL MAKES OF PROPELLERS

Our equipment insures correct pitch and balance. Not responsible for propellers breaking during adjusting.

| Diameter | Price | Diameter | Price |
|----------------|--------|----------|---------|
| 14 in. or less | \$3.00 | 24 in. | \$10.00 |
| 15 | 4.00 | 26 | 12.00 |
| 16 | 5.00 | 28 | 14.00 |
| 17 | 6.00 | 30 | 16.00 |
| 18 | 7.00 | 32 | 18.00 |
| 20 | 8.00 | 34 | 20.00 |
| 22 | 9.00 | 36 | 23.00 |

Price includes buffing and repolishing. Be sure to tag each propeller.

SHEET PACKING

RUBY



Its flexible, soft structure conforms to any inequalities in the face of the flange; with one side graphited, the joint can be broken repeatedly without injury to the packing or impairing its effectiveness; retains its flexibility in the hottest joints, without hardening or becoming brittle. Also makes a perfect packing for hydraulic and cold joints of all kinds, steam, alkali, ammonia, etc. In roll, 36 inches wide.

| Thickness, Inch | Per Pound | Thickness, Inch | Per Pound |
|-----------------|-----------|-----------------|-----------|
| $\frac{1}{32}$ | \$..... | $\frac{1}{8}$ | \$..... |
| $\frac{1}{16}$ | | .. | |

ASBESTOS METALLIC

For high pressure service, such as gas and gasoline engines, steam turbines and all equipment where high temperatures prevail. Woven of finest long fibre asbestos yarn, each strand of both warp and filler having brass wire interwoven to give it strength. Coated one side with a fine para, non-vulcanizing rubber. Furnished one side graphited or without graphite. Width, 40 inches.

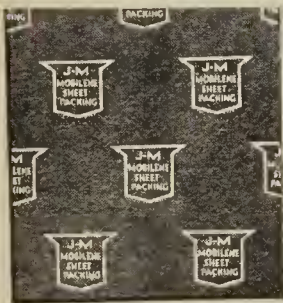
| Thickness, Inch | Per Pound |
|-----------------|-----------|
| $\frac{1}{16}$ | \$..... |
| $\frac{1}{8}$ | |



MOBOLINE

For packing gasoline and oil engine parts. Suitable for cylinder head use. Made of asbestos fabric with fine brass wire interwoven and impregnated with a compound to withstand high temperatures. Graphited on one side. In rolls, 40 inches wide.

| Thickness, Inch | Per Pound |
|-----------------|-----------|
| $\frac{1}{32}$ | \$..... |
| $\frac{1}{16}$ | |



VELLUMOID—FIBRE

For oil, gasoline and water connections. A strong fibre sheet packing, chemically treated, making it oil, gasoline, water and air-proof. Will not deteriorate. Oils, gasoline and water merely increase its strength. Stands any temperature up to 350 degrees Fahrenheit. Cannot be used on cylinder head or exhaust. Gaskets are easily cut out with a knife or can be tapped out. The width of the stock is 36 inches.

| Nos. | Thickness, Inch | Weight per Square Yard, Lbs. | Per Square Yard |
|------|-------------------------|------------------------------|-----------------|
| 3 | .015 ($\frac{1}{64}$) | 12 ozs. | \$0.80 |
| 5 | .032 ($\frac{1}{32}$) | 23 ozs. | 1.60 |
| 6 | ($\frac{1}{16}$) | 2.6 lbs. | 3.00 |



FRICTION TAPE

Made of strong, closely woven fabric, heavily impregnated with a special treated compound. Has remarkable adhesive properties and long life. Is not affected by heat, cold or moisture. Will not dry out with age. Contains nothing to corrode wires. Free from pin holes, lumps and thin spots. Has exceptional insulating efficiency due to the heavy and even saturation.

| Size of Roll, Lb. | Width Tape, Inch | Each |
|-------------------|------------------|--------|
| $\frac{1}{2}$ | $\frac{1}{2}$ | \$0.28 |
| 1 | $\frac{1}{2}$ | .56 |

Ten Rolls in a Box



GRAPHITED ASBESTOS PACKING

TWISTED



Also used in globe valves, blow-off cocks, injectors and bilge pumps. Made of long fibre asbestos, strands twisted together; saturated in lubricating compound and graphited; can be untwisted to make any size packing desired.

| Size, Inches | Per Foot | Size, Inches | Per Foot |
|----------------|----------|----------------|----------|
| $\frac{1}{8}$ | \$0.05 | $\frac{5}{16}$ | \$0.10 |
| $\frac{3}{16}$ | .06 | $\frac{3}{8}$ | .12 |
| $\frac{1}{4}$ | .08 | .. | ..... |

Furnished On One Pound Spools

SQUARE FLAX PACKING

FOR STUFFING BOXES AND PUMPS

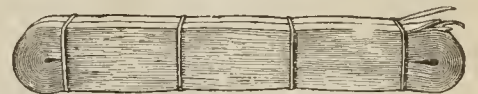
Will not disintegrate if used with hot or cold water; made from pure Russian flax in long fibres, free from hemp or tow or other adulterations; has elasticity required; carefully braided square and treated with lubricants; resists heat, water and friction. Made in all sizes; sixteenths and eighths, from $\frac{1}{8}$ to 3 inches.

| Size, Inches | Per Foot | Size, Inches | Per Foot |
|----------------|----------|----------------|----------|
| $\frac{1}{8}$ | \$0.05 | $\frac{3}{8}$ | \$0.11 |
| $\frac{3}{16}$ | .05 | $\frac{7}{16}$ | .13 |
| $\frac{1}{4}$ | .07 | $\frac{1}{2}$ | .15 |
| $\frac{5}{16}$ | .09 | .. | ..... |

Furnished On One Pound Spools

RAWHIDE LACING

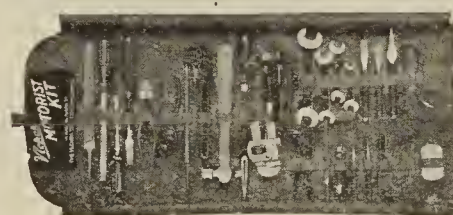
Hand cut, to insure freedom from defect, from a good grade of rawhide grain leather that is made from strictly green salted packer hides; smooth finish; well oiled; very soft and pliable. Uniform thickness; has great strength; is thoroughly stretched.



Put up in bundles of 100 feet. Per 100 Feet
 Sizes, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$ Inch.....\$.....

Prices on Application

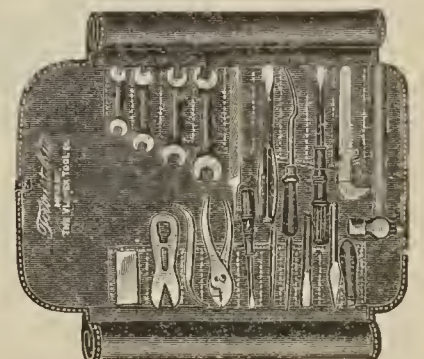
TOOL KITS



No. 902—Thirty Pieces\$12.00

This kit contains sufficient tools of a high quality to take care of all the usual jobs on a boat.

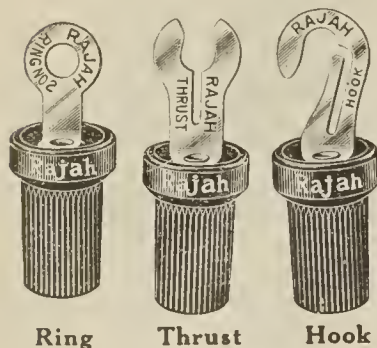
Per Set



No. 906—Twenty Pieces\$6.00

Per Set

WIRE TERMINALS



terminals as illustrated.

| Nos. | Type | Each |
|------|--------|--------|
| 2-R | Ring | \$0.09 |
| 3-T | Thrust | .10 |
| 4-H | Hook | .10 |



HOOD

RAJAH BAKELITE HOOD

LIST PRICE\$0.10



U. S.—Nipple

RAJAH U. S. GOVT. TYPE
NIPPLE

LIST PRICE\$0.12

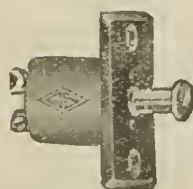
Note—THE U. S. GOVT. Type Nipple can be used with the Bakelite Hood.

SWITCHES



Designed to meet the demand for a good switch that can be installed without cutting a large hole in the dash; the button and finishing nut are of brass, nickel plated finish.

(G-550—Weight per Carton, 2 Lbs.\$0.50
Twenty-five in a Display Carton



PUSH AND PULL

Single button switch for control of a single or a group of lighting circuits from a given point; nickel plated finish.

| Nos. | No. of Gangs | Weight Each, Ounces | Each |
|------|--------------|---------------------|--------|
| 11 | 1 | 1 | \$0.49 |
| 12 | 2 | 2 | .98 |

TOGGLE SWITCH

Used for control of single or a group of lighting circuits from a given point; furnished single or in gangs; nickel plated finish.



| Nos. | No. of Gangs | Weight Each, Ounces | Each | Nos. | No. of Gangs | Weight Each, Ounces | Each |
|------|--------------|---------------------|--------|------|--------------|---------------------|--------|
| 1 | 1 | 1 1/4 | \$0.49 | 3 | 3 | 3 3/4 | \$1.47 |
| 2 | 2 | 2 1/2 | .98 | 4 | 4 | 5 | 1.96 |

BATTERY SWITCHES



No. 707
Single Pole



No. 709
Double Pole

Adapted for use where a small compact switch is desirable. All current carrying parts are of hard drawn copper mounted on porcelain or fibre bases. Single pole types have composition handles; double pole type have wood handles, black enameled.

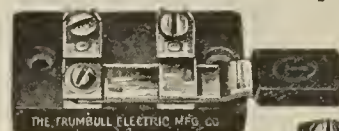
With Porcelain Base

| Nos. | Description | Size Base, Inches | Each |
|------|---------------------------|-------------------|--------|
| 707 | Single Pole, Single Throw | 2 1/8 x 1 1/4 | \$0.35 |
| 708 | Single Pole, Double Throw | 3 5/8 x 1 5/8 | .60 |
| 709 | Double Pole, Single Throw | 2 1/8 x 2 | .65 |
| 710 | Double Pole, Double Throw | 3 5/8 x 2 | .90 |

With Fibre Base

| Nos. | Description | Size Base, Inches | Each |
|------|---------------------------|-------------------|--------|
| 7 | Single Pole, Single Throw | 2 1/2 x 1 1/8 | \$0.44 |
| 8 | Single Pole, Double Throw | 3 3/4 x 1 1/8 | .68 |
| 9 | Double Pole, Single Throw | 2 1/2 x 2 | .84 |
| 10 | Double Pole, Double Throw | 3 3/4 x 2 | 1.60 |

With Composition Base



No. 1

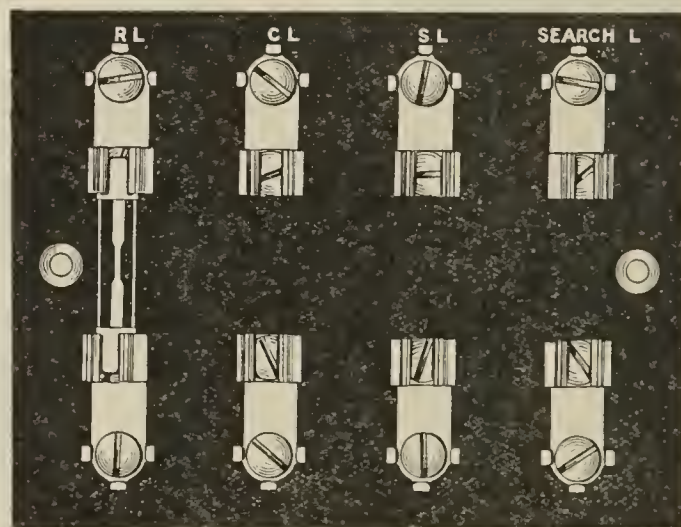
No. 2



Side pattern; composition base and handle.

| Nos. | Description | Size Base, Inches | Each |
|------|---------------------------|-------------------|--------|
| 1 | Single Pole, Single Throw | 1 1/8 x 2 1/8 | \$0.35 |
| 2 | Single Pole, Double Throw | 1 1/8 x 2 1/4 | .45 |

CUT-OUT PANELS



Ideal form of safety fuse cut-out panel for small boats. Made of polished, hard black rubber with nickel plated fuse clips. Uses 1 1/2 inch ordinary glass fuses, 2 to 5 amperes according to load. Marked in gold to indicate riding, cabin, side and searchlight. Size, 3x4 inches and 1/4 inch thick.

No. CP1—Weight Each, 3 1/2 Ounces.....\$1.50

IGNITION SWITCHES

ROBT. BOSCH



Neat appearing small lever switch; has compression type positive contact post, well insulated. Entirely different from ordinary switches. Diameter, 1 1/4 inches.

No. SJ22-1—Weight Each, 2 1/4 Ozs...\$2.00

IGNITION AND LIGHTING CABLE

S.A.E.—RUBBER CABLE



PLAIN—GRAY
For primary ignition, wiring or any low tension work; single layer rubber insulation; stranded copper conductor.

No. 5173-5MM— $\frac{1}{8}$ Inch in Diameter; 16 Gauge;
Weight per 100 Feet, 3 Lbs. **\$3.50**

Magneto, secondary cable for all high tension wiring; one layer of rubber insulation; stranded copper conductor.



| Nos. | Gauge | Size, Inch | M/M | Weight 100 Feet, Lbs. | Per 100 Feet |
|-------|-------|-----------------|-----|-----------------------|---------------|
| 5702 | 16 | $\frac{7}{32}$ | 7 | $6\frac{1}{4}$ | \$4.75 |
| 5902 | 16 | $\frac{11}{32}$ | 9 | $6\frac{1}{4}$ | 8.75 |
| 5641* | 16 | $\frac{9}{32}$ | 7 | $6\frac{1}{3}$ | 8.00 |

*Has a single braid cover over rubber and is gloss black, Duco-Lac coated.

S.A.E.—BRAIDED CABLE



Primary cable for low tension use, horn and lighting service; has single rubber insulation and single braided cotton cover with a wax finish; one layer of rubber insulation.

No. 5162-4MM— $\frac{1}{4}$ Inch Diameter; 16 Gauge;
Weight per 100 Feet, $1\frac{1}{4}$ Lbs. **\$4.75**

Magneto and high tension or secondary cable; one layer of rubber insulation and cotton braid; with a wax finish.



No. 5611-7MM— $\frac{1}{4}$ Inch Diameter; 16 Gauge;
Weight per 100 Feet, $4\frac{3}{4}$ Lbs. **\$8.00**



Multiple conductor or duplex cable for lighting and low tension use; has a braided cotton cover; enameled finish.

No. 5911—16 Gauge; Size, $\frac{7}{8} \times \frac{1}{2}$ Inch; Weight per 100 Feet, $5\frac{1}{2}$ Lbs. **\$5.50**

All Above Items Furnished in 100 Foot Spools

FLEXIBLE CORD

GREEN AND YELLOW

New code twisted cord; for general use in wiring and for extensions and drop lights.



No. 5801—18 Ga. $\frac{3}{32}$ Inch Insulation..... **\$8.00**

PORTABLE TOOL CORD

For unusually rough service. Has a 40 percent wall of Para rubber and cord reinforcement.

No. 5810—18 Gauge; Two Conductor **\$18.00**

LEAD ENCASED CABLE

FOR BOAT WIRING

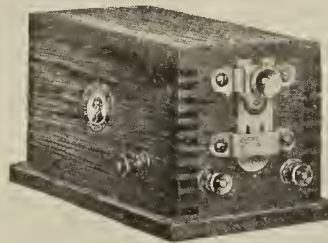


to the action of grease, oil or water.

Solid

| Gauge | Outside Diameter, Inch | Weight per 100 Feet, Lbs. | Twin, per 100 Feet |
|-------|------------------------|---------------------------|--------------------|
| 16 | .207 | 104 | \$18.00 |
| 18 | .196 | 97 | 22.40 |

JUMP SPARK COILS

JEFFERSON
JUMP SPARK
VIBRATING BOX TYPE

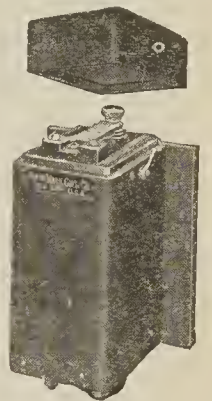
Designed to give service and satisfaction under the most adverse operating conditions; economical in battery consumption and produces a hot intensive spark; the contact points are made of the very best grade of tungsten; assembled in a dovetailed highly polished seasoned oak case, and sealed with a waterproof compound.

| No. | For Use With Number of Cylinders | Size of Box, Inches | Weight Each, Lbs. | Each |
|-----|----------------------------------|--|-------------------|---------------|
| 51 | 1 | $6\frac{1}{4} \times 3\frac{3}{4} \times 3\frac{3}{8}$ | $2\frac{1}{2}$ | \$4.00 |

NEW YORK
REGULAR—MODEL 60

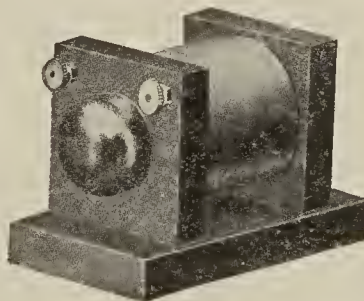
Specially designed for marine and stationary engine work; wound with high grade insulated wire and impregnated with special heat resisting and insulating material; windings and condenser are carefully balanced, arcing at contact points is virtually eliminated; vibrator points are composed of an alloy of iridium and platinum and are of ample size.

The vibrator parts are mounted on a hard rubber base, which renders perfect insulating, and rigid mounting; each coil is enclosed in nicely finished hardwood case, with cover and hook lock; can be furnished for 1 to 4 cylinder engines, of not more than 10 horsepower per cylinder.



| Nos. | Number of Cylinders | Height | Size of Case, Inches—Width | Depth | Weight Each, Lbs. | Each |
|------|---------------------|----------------|----------------------------|----------------|-------------------|---------------|
| 60 | 1 | $8\frac{1}{2}$ | $4\frac{1}{2}$ | $3\frac{3}{4}$ | $2\frac{1}{2}$ | \$5.65 |
| 61 | 2 | $8\frac{1}{2}$ | $6\frac{3}{4}$ | $3\frac{3}{4}$ | 5 | 11.30 |
| 62 | 3 | $8\frac{1}{2}$ | $8\frac{3}{4}$ | $3\frac{3}{4}$ | 7 | 16.95 |
| 63 | 4 | $8\frac{1}{2}$ | $10\frac{3}{4}$ | $3\frac{3}{4}$ | 9 | 22.60 |

MAKE AND BREAK SPARK COILS



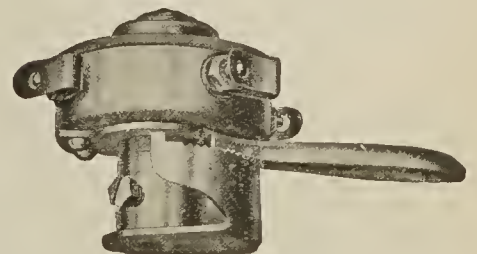
Designed especially for make and break systems where a hot spark of large volume at low voltage is required. It is wound with a number of layers No. B. & S. gauge, soft copper wire to resistance of .675 ohms, upon a core, $1\frac{1}{4}$ inches in diameter.

| Nos. | Size of Base, Inches | Height Overall, Inches | Weight Each, Lbs. | Each |
|------|------------------------------------|------------------------|-------------------|---------------|
| E1 | $7 \times 3\frac{3}{4}$ | $4\frac{1}{4}$ | 6 | \$5.50 |
| E2 | $5\frac{1}{4} \times 2\frac{3}{4}$ | $3\frac{1}{4}$ | $2\frac{1}{2}$ | 3.40 |

TIMERS

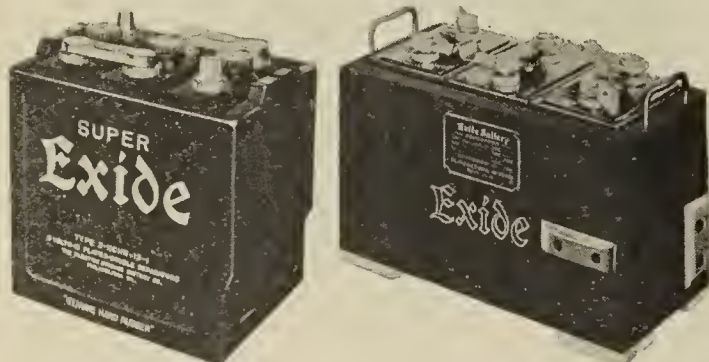
CUNO

Lever is riveted to timer case and bent outward, thereby holding steel wedge, which is riveted to underside of lever, in spring contact with teeth in sector. The natural spring of lever is sufficient to hold timer in any desired position.



| No. of Cylinders | Weight Each, Lbs. | Each |
|------------------|-------------------|---------------|
| 1 | $\frac{5}{8}$ | \$4.40 |
| 2, (90°) | $\frac{5}{8}$ | 4.60 |
| 2, (180°) | $\frac{5}{8}$ | 4.60 |
| 3 | $\frac{3}{4}$ | 4.80 |
| 4 | $\frac{3}{4}$ | 5.00 |

MARINE Exide SERVICE BATTERIES



Type XCHR

Type LXRH

No matter how large or small your boat may be there is an Exide Battery of proper size and capacity to take care of its entire electrical requirements.

The capacity of the battery required aboard your boat depends not only on the type of boat, but also how it is used. Aboard the majority of smaller boats, since they have little electrical auxiliary equipment, either 6 or 12 volt batteries are used, depending upon the voltage necessary for engine starting.

LIGHT DUTY EXIDES FOR SPORT CRAFT

| Type | | Length, Inches | Approximate Weight in Lbs. | Capacity | | Price Each |
|---------------------|------|-------------------|----------------------------------|---------------------------|-------------------------|---------------|
| | | | | 20-Min. Rate, Amps. | 8-Hour Rate, A.H. | |
| 3 Cell—6 Volt Types | | | | | | |
| 3-XCHR | 13-1 | 9 $\frac{1}{16}$ | 47 | 114 | 86 | \$20.85 |
| | 15 | 10 $\frac{3}{16}$ | 54 | 133 | 100 | 30.40 |
| | 17 | 11 $\frac{5}{16}$ | 61 | 152 | 114 | 34.50 |
| | 19 | 12 $\frac{7}{16}$ | 68 | 171 | 129 | 38.40 |
| 3-XCH | 13-1 | 9 $\frac{1}{16}$ | 47 | 114 | 86 | 15.45 |
| | 15 | 10 $\frac{3}{16}$ | 54 | 133 | 100 | 24.80 |
| | 17 | 11 $\frac{5}{16}$ | 61 | 152 | 114 | 28.70 |
| | 19 | 12 $\frac{7}{16}$ | 68 | 171 | 129 | 29.95 |
| | 21 | 13 $\frac{9}{16}$ | 75 | 190 | 143 | 38.25 |

6 Cell—12 Volt Types

| | | | | | |
|------------|--------------------|----|----|----|---------|
| 6-XCR 13-1 | 16 $\frac{15}{16}$ | 85 | 98 | 73 | \$46.10 |
| 6-XC9-1R | 12 $\frac{3}{8}$ | 64 | 65 | 49 | 16.65 |

Maximum width above Types 7 $\frac{1}{8}$ inches—Maximum width 9 $\frac{5}{8}$ inches. 6 Cell 12 volt batteries can be made up of 2-3 Cell units with suitable jumper.

3 Cell—6 Volt Types

| | | | | | |
|-------------|--------------------|-----|-----|-----|---------|
| 3-KXK 13-1 | 17 $\frac{1}{4}$ | 95 | 137 | 112 | \$25.80 |
| 15 | 19 $\frac{1}{2}$ | 110 | 160 | 131 | 30.15 |
| 19 | 24 | 139 | 205 | 169 | 36.30 |
| 21 | 26 $\frac{1}{4}$ | 155 | 23 | 188 | 40.95 |
| 3-LXRH 13-1 | 13 $\frac{1}{4}$ | 67 | 127 | 101 | 31.25 |
| 15 | 14 $\frac{15}{16}$ | 76 | 150 | 117 | 34.55 |
| 17 | 17 $\frac{1}{4}$ | 87 | 170 | 134 | 38.70 |
| 21 | 20— | 106 | 213 | 168 | 50.35 |
| 25 | 24 | 125 | 255 | 201 | 56.95 |

6 Cell—12 Volt Types

| | | | | | |
|------------|------------------|-----|-----|-----|---------|
| 6-KXK 9-1 | 23 | 131 | 91 | 75 | \$40.20 |
| 11 | 27 $\frac{1}{2}$ | 160 | 115 | 94 | 46.50 |
| 13 | 32 | 189 | 137 | 112 | 51.60 |
| 6-LXRH 9-1 | 18— | 94 | 85 | 67 | 46.50 |
| 11 | 23 | 114 | 106 | 84 | 53.10 |
| 13 | 25 $\frac{1}{4}$ | 132 | 127 | 101 | 57.55 |
| 15 | 28— | 152 | 150 | 117 | 65.45 |
| 17 | 32 | 171 | 170 | 134 | 72.15 |

*16 Cell—32 Volt Types

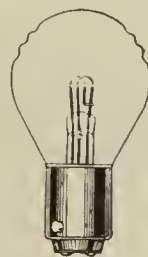
| | | | | | |
|----------|-------------------|-----|-----|-----|----------|
| 16LXRH 9 | *12 $\frac{7}{8}$ | 208 | 85 | 67 | \$134.80 |
| 13 | *17 $\frac{1}{8}$ | 280 | 127 | 101 | 170.00 |
| 15 | *19 $\frac{3}{8}$ | 320 | 150 | 117 | 187.60 |
| 17 | *21 $\frac{5}{8}$ | 360 | 170 | 134 | 210.90 |
| 21 | *26 $\frac{1}{8}$ | 440 | 213 | 168 | 273.10 |

*Assembly in 4—4 Cell Trays—Length given is of one 4-Cell Tray.

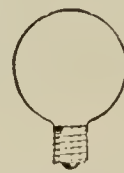
The above Types supplied with or without insulator equipment as desired. Width above Type 7 $\frac{1}{8}$ inches; height 10 $\frac{1}{2}$ inches not including insulators. For these add 1 $\frac{1}{2}$ inches to length and width and $\frac{3}{4}$ inch to height.



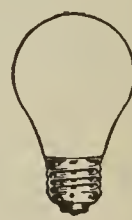
MAZDA LAMPS FOR BOAT SERVICE



Type S



Type G



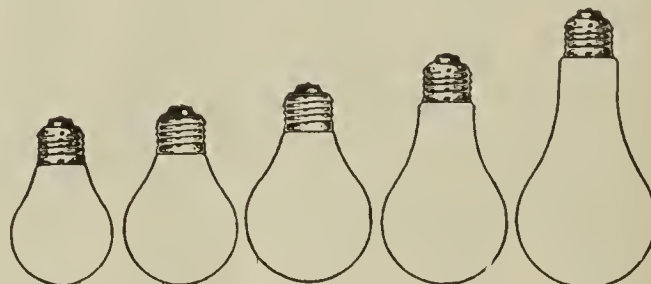
Type A

With Double Contact Base

| Voltage | Candle Power | Type Bulb | Each | |
|---------|--------------|--------------------|--------|---------|
| | | | Clear | Frosted |
| 6 | 3 | G 6 | \$0.15 | .... |
| 6 | 6 | G 6 | .16 | .... |
| 6 | 15 | S 8 | .25 | .... |
| 6 | 21 | S 10 | .25 | .... |
| 6 | 32 | S 10 | .55 | .... |
| 6 | 15 | G 16 $\frac{1}{2}$ | .80* | \$0.90 |
| 12 | 3 | G 6 | .25 | .... |
| 12 | 6 | G 6 | .35 | .... |
| 12 | 15 | S 8 | .40 | .... |
| 12 | 21 | S 10 | .45 | .... |
| 32 | 6 | G 8 | .65 | .... |

With Medium Screw Base

| | | | | |
|----|----|--------------------|--------|--------|
| 6 | 10 | G 16 $\frac{1}{2}$ | \$0.80 | \$0.90 |
| 6 | 25 | G 16 $\frac{1}{2}$ | 1.15 | 1.25 |
| 6 | 15 | A 17 | .... | .70 |
| 6 | 25 | A 19 | .... | .70 |
| 12 | 15 | G 16 $\frac{1}{2}$ | 1.30 | 1.40 |
| 12 | 25 | G 16 $\frac{1}{2}$ | 1.40 | 1.50 |
| 12 | 15 | A 17 | .... | .70 |
| 12 | 25 | A 19 | .... | .70 |
| 32 | 15 | G 16 $\frac{1}{2}$ | 1.15 | 1.25 |
| 32 | 25 | G 16 $\frac{1}{2}$ | 1.40 | 1.50 |
| 32 | 15 | A 17 | .... | .50 |
| 32 | 25 | A 19 | .... | .50 |



Type A17

Type A19

Type A21

Type A21

Type A23

FOR COMMERCIAL SERVICE

110-120 Volts

| Watts | Type Bulb | Each | |
|-------|-----------|-------|---------|
| | | Clear | Frosted |
| 15 | A 17 | .... | \$0.20 |
| 25 | A 19 | .... | .20 |
| 40 | A 19 | .... | .20 |
| 60 | A 21 | .... | .20 |
| 75 | A 23 | .... | .35 |
| 100 | A 23 | .... | .35 |
| 150 | P.S. 25 | .60 | .65 |
| 200 | P.S. 30 | .80 | .85 |

NOTE—Bulb size figures indicate the greatest diameter in eighths of an inch.

A G6 type bulb measures 6 eighths or three-quarters of an inch in diameter.

SPARK



PLUGS



Type A



Type E



Type C



Type G-1 to G-8



Type G-9 to G-14



Type N

MARINE ENGINES—OUTBOARD

*Caille—Models 10, 12, Liberty TwinE
Models 20, 22, 30, Liberty SingleC
Models 32, 42, 24, 14, Motor-go Jr., Motor-go Sr., Motor-go Big BoyG-10
Models 27, 28, 34, 35, 36, 40, 44, 45, 46, 47, 48, 49, 50.....G-7
Models 25, 26.....G-4½

*Cross—
1929 Radial 5.....W

*Cross—
1930 Radial 5G-8
*Elto—J. K, 23K, 28K, Lightweight, Service Speedster, Floodlight, Senior Speedster...G-8
*Elto—All others...G-6

*Evinrude—1928....AM
1929-30G-6
F-60G-3½

Hartford—
All ModelsG-8
Indian—All Models G-14
Johnson—10R, 14R, 16R, 32R, 25R, 24RG-2½
10, 14, 16, 32, 25, 12, 24G-6
All OthersG-8

*Lockwood—Racing ChiefG-2½

Lockwood—
All OthersG-7

*Neptune Twin—
All ModelsW
Spinaway—All Models..F

Anderson—All Models..F
Bridgeport—All ModelsF

*Brennan Std.—Models N-4, E-4, D-6.....B
All OthersG-11
Brill—All Models..NN-1

*Buchanan Bull Dog—
Models using Continental engines H-8, L-29, 16C, 20L.....A
Models using Continental eng's 12 K, G-12

*Buda—All Models to 1927 incl.E
Models HM-260, HM-298G-10
Models BMA-6, BM-386, BM-411..G-6
All OthersA or Y
Buffalo—Model BA-4..I
Models CE-4, DE-4...Z
Models R-4, RA-4...C
Model BKK.....F
Cady—All ModelsF

*Capitol—Wright H-3; Liberty 12 H. C.....N
Liberty 12 L. C.; Hispano Suiza-220; Curtiss OX-5N-1
All OthersY
Chrysler Imperial—
Models AMRY
Crown and Majestic CG-8
All OthersNN

*Curtiss OX-5—
All ModelsG-9
Detroit-Marine—
All ModelsG-8
Dodge Water Car—
Models using Univ. engines 85 H.P...G-10
Models using Lycoming engines 115 H.P., 40 H.P.G-9

MARINE ENGINES—INBOARD

Models using Chrysler engines 105 H.P., 120 H.P.NN
Models using Scripps engines 150 H.P., 200 H.P.G-6

*Cyclone—All Models..Y
Doman—Models K-1, K-2F
All OthersA

*Elco—
Models F-6, F-42, F-62Y
Model A-4A
Evansville—All Models F
Falcon—All Models..A
Fay & Bowen—Challenger, Conqueror, Defender, T, T-2.....Y
All OthersE
Faybow—Continental—
Challenger, Conqueror, DefenderY
All OthersE
Ford—Model T.AC-1075
Models A, AA, AC-575
Frisbie—All Models..F

*Gray—
Model 8-H. S.....G-6
Model H-8G-9
Model 6-50G-14
Models 4-50, 6-40, 4-75B
Models 4-25, 4-30, 17-27, 37, 4-41...Z
Models 444, 660, 670Y
All OthersA
Hall-Scott—Models L, LN-6AG-6
Other Models of 1930-29-28G-8
All Others prior to 1927L-10

Hartford—
All ModelsG-6
Hubbard—All Models..C
Kermath—Models K-85, K-125, 9-150, R-200G-6
All OthersZ

*Lathrop "Mystic"...E
All OthersB
Lockwood—
All ModelsN-1

*Long Island
Model BG-11
Model M and MS...E
All OthersF
Lycoming—
All ModelsG-9
Lyon and Tuttle—
Model 60N
Mack 6 cyl..G-8 or D-8
Mayback Zeppelin—
All ModelsG-6
Miller—Model E-6...E
All OthersF

*M and T—Models J-6, K-6G-13
Model KG-8
All OthersC
Niagara—1930 8 cyl. Models ...G-10
Models MS, HS, HSS, 8L, 8MF
All OthersF
Packard—Models IM-268, IM-357....I
Models IM-6-621E
Models IM-124, 2M-1551, G-2½ or G-7
Palmer—Model NK-4A or Y
All OthersC

*Peerless—
All 4 cyl. Models...F
All 6 cyl. Models...C

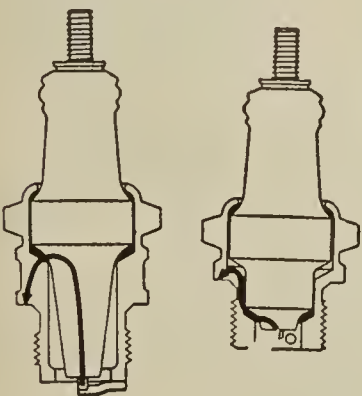
*Pontiac—
1930 ModelsG-14
All Models to 1929 incl.B
Red Wing—Models D, K, W-6, Arrow Jr...E
All OthersC
Regal—Models GF, KFC
Models HA, GP, GC..I
All OthersZ

*Roberts—
Model HSG-14
Model OXC
All OthersF
St. Lawrence—
All ModelsF
Sanderson Cyclone
Models A, AR.....Y
Scripps—Models D-2, F-4, F-6, E-2....L-10
Models 84, 120....G-8
Model 124G-11
All OthersG-6
Speedway
All ModelsA

*Standard—All Models..E
*Stearns—All Models..B
Sterling—Model NeptuneF or Q
Model Viking II...NN
Model Dolphin Special 6E
All OthersA
*Universal (Blue Jacket)
Models GL, N.....E
Models AB, 6-77, 6-88, 8-115G-10
All OthersNN
Van Blerck—Model Van Blerck, Jr....G-8
All OthersA
Winton—Model 124..E
All OthersZ

Wisconsin—
All ModelsA
Wright—All Models..N

A. C. Heat Range



The new line of A. C. Spark Plugs is the greatest step forward made in spark plug manufacture in years, especially in respect to the matter of meeting, with a limited number of plugs, the great variety of engine conditions encountered in present day motors. The heat at spark plug points does not dissipate through the threaded portion of the shell, but travels through the tip of the insulator body to the gasket seat; thence through the gasket, spark plug shell and outside plug gasket into the cylinder wall and cooling water (or air). Each step in line takes care of a definite heat range, so that the user of one type of plug may correct any spark plug difficulty he may be having, or meet any new

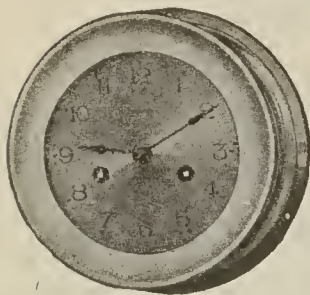
operating condition which his engine may encounter by simply going to another step—either upwards or downwards. For instance, an engine equipped with Type G12 plugs which (due to unusual operating conditions) experiences spark plug pre-ignition trouble can be satisfactorily taken care of by changing to Type G-11; or N spark plug fouling is the trouble, it can be corrected by changing to Type G-13.

Types N, NN-1, NN.....\$0.75
All Others60
Long Life75

Each

MARINE CLOCKS

WATERBURY—SHIPS BELL



Finish
Polished Brass
Polished Bronze

Weight
Each, Lbs.
5 1/4
5 1/4

Each
\$30.00
34.00

No. 10SB

An ornamental clock with a true nautical touch. Has a ten-spoke steering wheel design and 4 1/2 inch silvered metal dial; 8 day jeweled movement with self adjusting strike feature, which insures the clock striking the proper hour even though the hands are turned back. Sets and winds with a key.



Finish
Polished Brass
Polished Bronze
With Radium Dial, Net Extra

Weight
Each, Lbs.
7
7

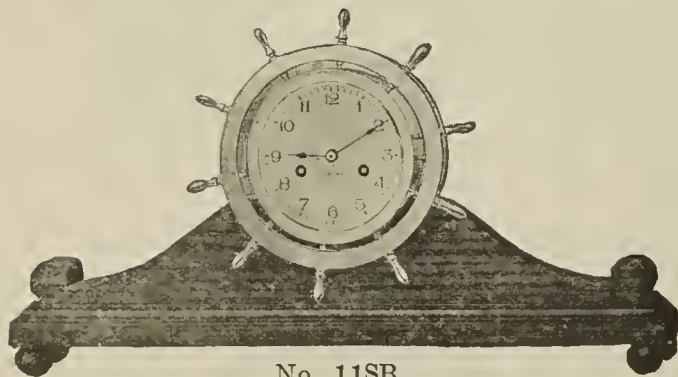
Each
\$37.50
43.00
4.00

No. 17SB

A neat design with polished brass jeweled, 8 day movement provided with self-adjusting strike feature. Silvered metal dial and beveled glass. Width, 5 5/8 inches; height, 8 inches. Sets and winds with a key.



| Finish | Numerals | Weight Each Lbs. | Each |
|-------------|----------|------------------|---------|
| Pol. Brass | Plain | 8 | \$45.00 |
| Pol. Bronze | Plain | 8 | 54.50 |
| Pol. Brass | Raised | 8 | 54.50 |
| Pol. Bronze | Raised | 8 | 64.50 |



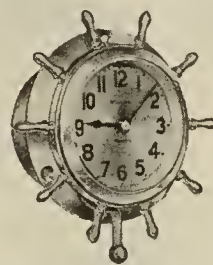
No. 11SB

Artistic design. Has polished brass 8 day movement with silvered metal dial; provided with self-adjusting strike feature. Mounted on a mahogany base. Height, 10 inches; width, 18 inches. Glass is convex and beveled.

| Finish | Weight Each, Lbs. | Each |
|-----------------|-------------------|---------|
| Polished Brass | 8 1/4 | \$48.00 |
| Polished Bronze | 8 1/4 | 53.50 |

MARINE CLOCKS

WATERBURY—MOTOR BOAT



Has silvered brass dial, 2 1/2 inch diameter and 8 day, jeweled movement which winds and sets by turning steering wheel. Particularly adapted for runabout, as body of clock is recessed into instrument board.

| Finish | Weight Each Lbs. | Each |
|-----------------|------------------|---------|
| Polished Brass | 1 1/2 | \$15.00 |
| Polished Bronze | 1 1/2 | 18 50 |

Note—Can be furnished with Barometer to match, \$5.00 extra.

No. 2MB

Has silvered brass dial, 2 1/2 inch diameter, and 8 day, jeweled movement which winds and sets by turning steering wheel. Designed for cabin bulkhead use.

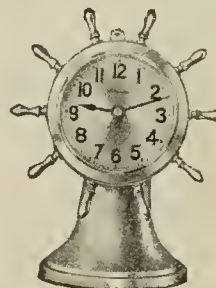
| Finish | Weight Each, Lbs. | Each |
|-----------------|-------------------|---------|
| Polished Brass | 2 | \$16.50 |
| Polished Bronze | 2 | 20.00 |



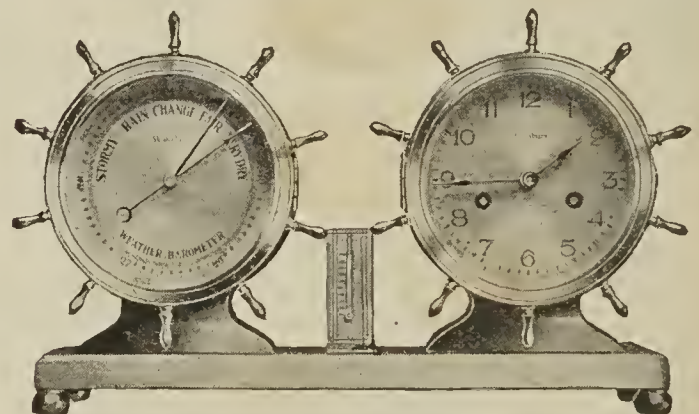
ENSIGN

Mounted upon brass pedestal. Has silvered brass dial, 2 1/2 inch diameter, and 8 day, jeweled movement, which winds and sets by turning steering wheel.

Height, 6 inches; diameter of base, 3 3/8 inches. Suitable for trophy or desk clock.



| Finish | Weight Each, Lbs. | Each |
|-----------------|-------------------|---------|
| Polished Brass | 4 1/4 | \$22.50 |
| Polished Bronze | 4 1/4 | 28.00 |



No. 16SB—With BAROMETER AND THERMOMETER

Suitable for finest saloons or as trophies. Has polished brass, 8 day, jeweled movement with self-adjusting strike feature. Has 4 1/2 inch silvered dial and beveled glass. Height, 8 inches; width, 12 3/4 inches.

| Finish | Weight Each, Lbs. | Each |
|-----------------|-------------------|---------|
| Polished Brass | 15 3/4 | \$97.50 |
| Polished Bronze | 15 3/4 | 112.50 |

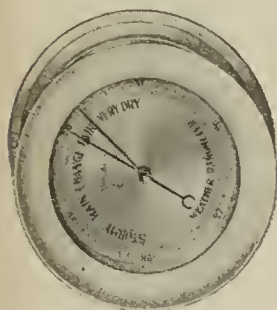
SHIPS' TIME—HOW TO TELL IT

At O'clock IT STRIKES

12.30—DING
1.00—DING,DING
1.30—DING,DING—DING
2.00—DING,DING—DING,DING
2.30—DING,DING—DING,DING—DING
3.00—DING,DING—DING,DING—DING,DING
3.30—DING,DING—DING,DING—DING,DING—DING
4.00—DING,DING—DING,DING—DING,DING—DING,DING
—DING,DING

4.30 to 8.00 and 8.30 to 12.00 o'clock, same as above.

ANEROID BAROMETERS WATERBURY



No. 1

A high grade instrument with 4½ inch silvered metal dial in brass or bronze finished case.

| Finish | Weight Each, Lbs. | Each |
|-----------------|----------------------|---------|
| Polished Brass | 5 | \$35.00 |
| Polished Bronze | 5 | 39.00 |

No. 10

An ornamental barometer with 4½ inch silvered metal dials in polished brass or bronze finished case.

| Finish | Weight Each, Lbs. | Each |
|-----------------|----------------------|---------|
| Polished Brass | 6 | \$42.50 |
| Polished Bronze | 6 | 48.00 |



No. 17

A neat design mounted on an artistic pedestal, silvered metal dial, 4½ inches diameter.

Polished brass or bronze case.
Height, 8 inches; width, 5½ inches.

| Finish | Weight Each, Lbs. | Each |
|-----------------|----------------------|---------|
| Polished Brass | 7 | \$50.00 |
| Polished Bronze | 7 | 59.50 |



ANEROID BAROMETERS WATERBURY

No. 102

Consists of a fine grade, non-compensated aneroid movement mounted in a beautiful mahogany finished case, suitable to either stand on a shelf or hang on a wall. Furnished with a 5-inch open standard dial. Height over all, 6⅞ inches.

No. 102—Weight Each, 2 Lbs.\$10.00



TAYLOR INSTRUMENT STORMOGUIDE

Junior Model

Furnished with white dial; bakelite case; glass crystal; aneroid movement; mahogany finish; supporting legs.

| | Each |
|--------------|---------|
| Junior Model | \$10.00 |
| Senior Model | 18.00 |



SHIP BELLS

PURE BELL METAL CAST WITH YOKE

Cast of strictly pure bell metal with cast brass yoke for attaching to deck. For use on steamships, yachts, tugs, etc.; furnished in rough and polished brass.



| Diameter, Inches | Weight Each, Lbs. | | Each | |
|---------------------|-------------------|----------|--------|----------|
| | Rough | Polished | Rough | Polished |
| 5 | 4½ | 4 | \$4.80 | \$6.00 |
| 6 | 6 | 5 | 5.65 | 6.85 |
| 7 | 9 | 8 | 8.40 | 9.60 |
| 8 | 16 | 14 | 14.40 | 16.20 |
| 8½ | 16½ | 14½ | 13.70 | 16.80 |
| 9 | 20 | 18 | 18.60 | 20.40 |
| 10 | 28 | 25 | 26.40 | 30.00 |
| 12 | 46 | 43 | 43.20 | 48.00 |
| 13 | 55 | 50 | 52.80 | 57.60 |
| 14 | 82 | 77 | 76.80 | 86.40 |
| 15 | 92 | 85 | 86.40 | 96.00 |
| 16 | 95 | 88 | 88.80 | 98.40 |
| 17 | 140 | 130 | 132.00 | 142.00 |
| 18 | 155 | 145 | 144.00 | 162.00 |

PURE BELL METAL REMOVABLE

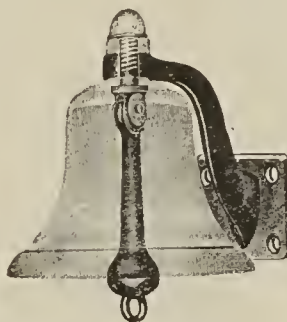
Cast of strictly pure bell metal, with detachable cast brass bracket which enables removal for cleaning or storing away—desirable for yachts and fine craft. Renders a loud, clear tone. Furnished in rough and polished brass.



| Diameter, Inches | Weight Each, Lbs. | | Each | |
|---------------------|-------------------|----------|--------|----------|
| | Rough | Polished | Rough | Polished |
| 5 | 4 | 3½ | \$4.80 | \$6.00 |
| 6 | 5 | 4½ | 5.65 | 6.85 |
| 7 | 8 | 7 | 7.80 | 9.00 |
| 8 | 14 | 12 | 13.80 | 15.60 |
| 8½ | 14½ | 12½ | 15.60 | 18.00 |
| 9 | 20 | 18 | 19.20 | 22.00 |
| 10 | 28 | 25 | 25.80 | 28.80 |
| 12 | 40 | 36 | 37.80 | 40.80 |

PURE BELL METAL STATIONARY

Cast of strictly pure bell metal with stationary bracket made of cast brass. Clapper swings fore and aft. For use on steamships, yachts, tugs, etc. Furnished in rough and polished.



| Diameter, Inches | Weight Each, Lbs. | | Each | |
|---------------------|-------------------|----------|--------|----------|
| | Rough | Polished | Rough | Polished |
| 5 | 3½ | 3 | \$4.20 | \$4.80 |
| 6 | 5 | 4¼ | 5.05 | 6.24 |
| 7 | 8 | 7 | 7.20 | 8.40 |
| 8 | 14 | 12 | 13.20 | 14.40 |
| 8½ | 14½ | 12½ | 15.65 | 16.80 |
| 9 | 18½ | 16 | 19.20 | 21.00 |
| 10 | 28 | 25 | 25.20 | 27.60 |
| 12 | 40 | 36 | 37.20 | 39.60 |
| 13 | 48 | 44 | 45.60 | 48.00 |
| 14 | 75 | 70 | 70.80 | 78.00 |
| 15 | 91 | 86 | 84.00 | 93.60 |
| 16 | 95 | 90 | 90.00 | 98.40 |
| 17 | 138 | 130 | 129.60 | 144.00 |
| 18 | 148 | 140 | 139.20 | 156.00 |
| 19 | 175 | 165 | 165.60 | 187.20 |
| 20 | 196 | 185 | 184.80 | 210.00 |
| 21 | 220 | 210 | 206.40 | 234.00 |

FOG BELLS

MEDIUM WEIGHT

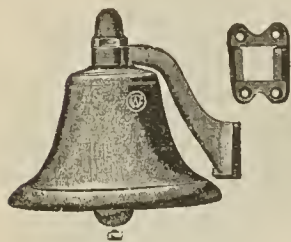


Fig. No. 420

| Diameter, Inches | PURE BELL METAL REMOVABLE | |
|---------------------|------------------------------|------------------|
| | Plain, Each | Polished Each |
| 6 | \$4.20 | \$5.20 |
| 8 | 7.50 | 8.85 |

WROUGHT BRASS REMOVABLE

Made of wrought brass; stamped; detachable bracket which enables bell to be easily taken down for cleaning; complies with regulations.

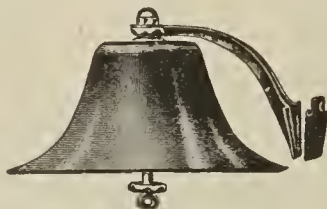


Fig. No. 159

| Diam., Inches | Each | |
|------------------|--------|----------|
| | Plain | Polished |
| 6 | \$1.10 | \$1.15 |
| 8 | 1.95 | 2.00 |

SIGNAL HORNS

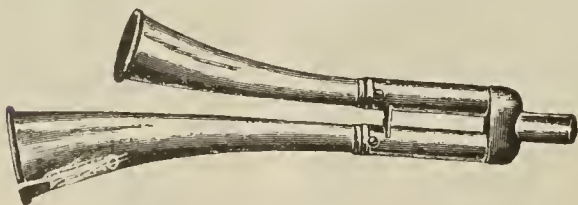


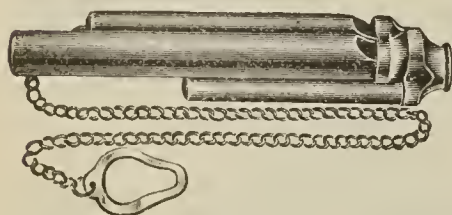
Fig. No. 165

TWO-TONE

Made of brass, highly polished; to be blown by mouth; gives an extra loud, continuous tone; can be taken apart and cleaned; fulfills the requirements of the United States laws for signaling on small boats; length overall, 9 inches.

| No. | Length, Inches | Each | |
|-----|-------------------|----------------|---------------|
| | | Polished Brass | Nickel-Plated |
| 2 | 10 | \$1.95 | \$2.10 |

WHISTLES



TRIPLEX MOTOR BOAT

Made of brass, nickel plated; 14 inches nickel plated safety chain with button fastener, securely fastened to

end of chain; length overall of whistle, 6½ inches; diameter, 1¾ inches; gives a clear and loud triple blast.

| | | Per Dozen |
|---|--|-----------|
| No. 5515—Weight per Dozen, 1¾ Lbs. | | \$7.80 |
| Six in a Box | | |

Fog Signals

In fog, mist or falling snow, whether by day or night, a steamship under way shall blow three blasts of her steam whistle every two minutes, or oftener. A sailing vessel under way shall blow her foghorn at intervals of not less than two minutes, when on the starboard tack one blast, when on the port tack two blasts in succession, and when with the wind abaft the beam three blasts in succession.

Vessels not under way shall ring the bell rapidly at intervals of not less than two minutes.

FOG HORNS

WITH ADJUSTABLE REED

These horns have a patented slide on the reed which controls the tone. Very easy to adjust or tune.

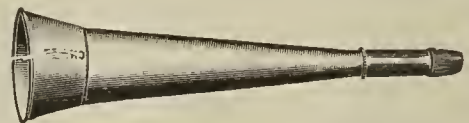


Fig. No. 162

| Length Overall Inches | | Per Dozen | |
|-----------------------------|---------------------------|-----------|------------|
| | | Tin | Galvanized |
| 18 | Without Bell | \$7.50 | \$9.00 |
| 20 | With Bell, as illustrated | 8.00 | 9.50 |
| 24 | With Bell, as illustrated | 9.50 | 11.00 |
| | | | 17.00 |

MECHANICAL FOG HORNS

LATHROPS



Box is of finished hardwood; all bearings and metal parts are of hard brass; air tube connections are screwed into composition elbows, making them airtight. Canvas forming cover to bellows is fastened to solid blocks of wood by brass strips forced into grooves and held in place by one inch brass pins, nailed at intervals of one inch apart. All inside wooden parts are dipped in oil to prevent shrinkage.

Adopted by all leading ship and yacht owners; also by steamship companies; is loud and easily operated. Endorsed by all marine underwriters.

| Nos. | Description | Length, Inches | Width, Inches | Height, Inches | Weight Each, Lbs. | Each |
|------|-------------|-------------------|------------------|-------------------|----------------------|----------|
| 00 | Extra Large | 30 | 12 | 19¾ | 51 | \$145.20 |
| 0 | Large | 20¾ | 10½ | 16⅝ | 30 | 57.60 |
| 1 | Vessel | 20¾ | 9½ | 16⅝ | 27½ | 39.60 |
| 2 | Yacht | 18½ | 9¼ | 16½ | 24½ | 34.80 |
| 3 | Boat | 17½ | 8¾ | 10¼ | 19½ | 31.80 |
| 4 | Launch | .... | .... | .... | .... | 21.60 |
| 5 | Small Boat | .... | .... | .... | .... | 17.40 |

MEGAPHONES

VULCANIZED FIBRE

Designed for marine use and all other places where hard service requires an extra high grade megaphone.

Made of selected sheets of fibre and fitted with solid brass nickel plated mouthpiece, rim and handle; larger sizes have a ring for hanging.



| Nos | Length; Inches | Diameter End, Inches | Each |
|-----|-------------------|-------------------------|--------|
| 90 | 18 | 9½ | \$2.00 |
| 92 | 22 | 11 | 2.25 |
| 94 | 30 | 12½ | 3.00 |
| 96 | 40 | 14 | 4.00 |

The mariner should not assume—

1. That he is out of ordinary hearing distance because he fails to hear the sound.
2. That because he hears a fog-signal faintly, he is a great distance away from it.
3. That he is near it because he hears the sound plainly.

ELECTRIC MARINE SIGNALS

SCHWARZE—MOTOR DRIVEN

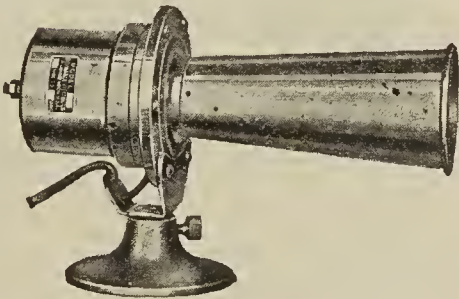
A motor driven signal for use on small craft such as motor boats, yachts, house boats, etc. It produces a loud, full, rolling tone with a good echo, a signal similar to those used on large automobiles. It is very satisfactory for large motor boats and is also used largely for industrial purposes. Designed for deck or running board installation and operates in any position from storage battery or dry cells with minimum current consumption. All brass construction; handsome design; finished in lacquered polished brass or nickel plated brass. Height, 10 inches; width at base, 5 1/4 inches. Splash and weather-



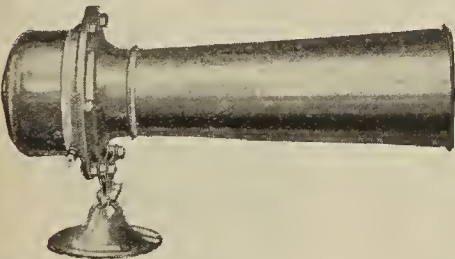
proof.
No. 16—Weight Each, 5 Lbs.....\$15.00

TIEBOUT

Motor driven type for power boats and automobiles; produces a loud, full, rolling tone and also produces a loud echo. Also used for industrial purposes. Is handsome in design and beautifully finished in polished brass and lacquered; mounted on a pedestal. Furnished regularly in six volts.



No. W.J.T.—Height, 7 1/2 Inches; Width, 4 1/2 Inches; Weight Each, 4 1/8 Lbs.\$8.00
Note: Other voltages supplied to order.



WHISTLETONE

Electric

Horn for cruisers and runabouts. No. 1 for use on small boats. No. 4 for large or powerful boats.

| Size No. | Voltage | Polished Brass | Chrome Pl. |
|----------|---------|----------------|------------|
| 1 | 6 or 12 | \$10.00 | \$12.50 |
| 4 | 6 or 12 | 20.00 | 25.00 |

For 32-volt equipment, add to above list..... 3.00

ORIGINAL BOSCH
VIBRATING

A vibrating armature type horn with an unusually large steel diaphragm which by means of a powerful electro-magnet vibrates at extremely high frequencies. The large sound chamber, an accurately dimensioned funnel and a wide bell collect the rapid vibration of the air column and form it into a loud clear tone of great carrying capacity and of unusual commanding character. Can be used mounted inside or outside and built for long service. The mechanism is protected against dust, does not need lubricating and cannot become out of order, bent models are black satin finish on brass, and are furnished with nickel plated bracket mountings. For boats, yachts, cars and trucks. A tone reducer with switch can be furnished at extra charge, for dampening the sound of the horn when driving in the city.

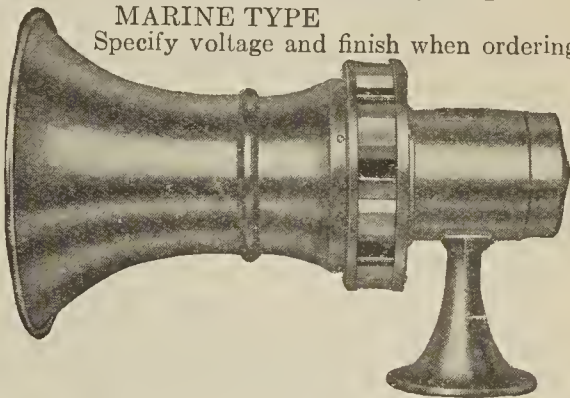


| Type | Voltage | Each |
|---------------------------------|---------|---------|
| Master, Black Finish Over Brass | 6 or 12 | \$25.00 |
| Master, Polished Brass Finish | 6 or 12 | 30.00 |
| Master, Chromium Plated, Brass | 6 or 12 | 33.75 |

ELECTRIC SIRENO-SIRENS

MARINE TYPE

Specify voltage and finish when ordering



| Nos. | | Diam. of Fan | Inches Length | Height | Each |
|------|----------------|--------------|------------------|--------|---------|
| 72 | Polished Brass | 4 | 11 3/4 | 8 | \$35.00 |
| 71 | Nickel Plate | 4 | 11 3/4 | 8 | 35.00 |
| 73 | Chrome Plate | 4 | 11 3/4 | 8 | 45.00 |
| 82 | Polished Brass | 5 1/2 | 13 3/4 | 9 1/2 | 50.00 |
| 81 | Nickel Plate | 5 1/2 | 13 3/4 | 9 1/2 | 50.00 |
| 83 | Chrome Plate | 5 1/2 | 13 3/4 | 9 1/2 | 65.00 |

“WHISTLESTONE” SIRENS

| Nos. | | Diam. of Fan | Inches Length | Height | Each |
|------|---------------------------|--------------|------------------|--------|---------|
| 61 | Black Enamel | 4 | 7 1/2 | 5 3/4 | \$12.50 |
| 62 | Polished Brass | 4 | 7 1/2 | 5 3/4 | 14.00 |
| 63 | Chrome | 4 | 7 1/2 | 5 3/4 | 15.00 |
| 92 | Brass, Vertical Mounting | 4 | 7 1/2 | 11 1/2 | 35.00 |
| 93 | Chrome, Vertical Mounting | 4 | 7 1/2 | 11 1/2 | 40.00 |

Furnished in 6 or 12 Volts—32 Volts—\$3.50 Extra

Specify Voltage and Finish

HORN BRACKETS

ROBT. BOSCH

Heavy pressed bracket which fits Master horns. Permits vertical mounting of horn on cabin or pilot house side.

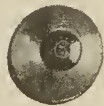


No. SI12/1—Weight Each, 7/8 Lb...\$1.00

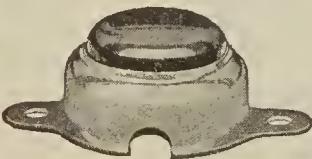
HORN BUTTONS

ROBT. BOSCH

Extremely neat appearing, nickeled push button for horn, automatic fuel pump, or remote control purposes. Large button; diameter, 1 1/4 inches.



No. SI3/1—Weight Each, 3 1/2 Ozs. ..\$1.00



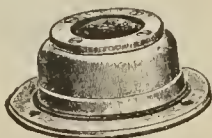
TIEBOUT

Wrought brass; polished nickel finish. Large black button. Weather and waterproof.

No. 23—Diameter, 1 1/8 Inches; Weight per Dozen, 14 Ounces\$6.00

NAVY WATER TIGHT PUSH BUTTON

No. 25653 Navy Standard Water Tight Push Button is supplied with rubber gaskets and pigskin cap over push, making same absolutely watertight. Recommended for marine use, cold storage houses and damp places. Contact parts are incased and protected against corrosion.
No. 25653—Size, 2 5/8 Inches; Cast Bronze Metal. Each Screw Cap. Hard Rubber Back and Center. German Silver Springs. Platinum Contacts.....\$2.50



MARINE AIR WHISTLES

CUNNINGHAM

Made for Every Size and Type of Craft Afloat



No. 1

No. 2

This type of whistle gives a far greater range and volume of sound with a smaller expenditure of energy than any other whistle made. It has a true, clear sound with remarkable echoing and fog penetrating qualities. The tone of the whistle depends on the size. Being made entirely of cast bronze, the horns cannot be dented or broken off and are entirely unaffected by vibration. They are operated on air pressures from 10 to 150 pounds and the high pressure type from 125 to 300 pounds. The No. 1 whistle will operate on 10 pounds pressure and the No. 2 from 15 to 20 pounds pressure. Larger sizes from 150 to 175 pounds pressure. Finish on all whistles are plain brass.

No. 1—For small motor boats.

No. 1S—For small motor boats—Deep tone.

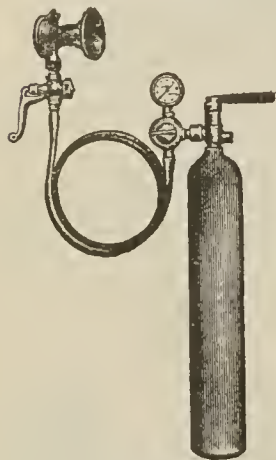
No. 2—For small tugs, motor boats and cruising yachts.

No. 3—For moderate sized cruising yachts.

No. 4—For large tugs and ferries, and large cruising yachts.

| Size Nos | Diameter of Disc, Inches | Length Over-All, Inches | Size of Pipe, Inches | Whistle Only | Whistle and Valve |
|-------------|--------------------------------|-------------------------------|----------------------------|-----------------|-------------------------|
| 1 | 3 | 4 3/4 | 1/4 | \$10.00 | \$16.00 |
| 1 S | 3 | 6 | 1/4 | 12.50 | 18.50 |
| 2 | 4 | 8 | 3/8 | 17.50 | 23.75 |
| 3 | 6 | 12 | 3/4 | 40.00 | 48.00 |
| 4 | 8 | 14 | 3/4 | 65.00 | 73.00 |

PRESSURE STORAGE SYSTEM



Complete equipment for this system, in addition to the Cunningham whistle and valve, consists of the small steel cylinder illustrated, with stop valve, regulator and gauge mounted on it, together with a length of copper tubing with unions, to connect the whistle valve with the cylinder.

Specifications of Complete Outfit, Including Tanks, etc.

| Size Whistle, Nos. | Capacity of Cyl. in Lbs. of Gas | No. of Blasts of Whistle per Charge | Complete Outfit | Spare Cylinder |
|----------------------------|---------------------------------------|---|--------------------|-------------------|
| 1 | 7 1/2 | 750 | \$58.50 | \$26.25 |
| 2 | 20 | 700 | 85.00 | 30.00 |
| 3 | 50 | 1000 | 135.00 | 45.00 |
| Price, Regulator Only..... | | | | 17.50 |

WHISTLE VALVES

Designed especially for air and burned gas pressure. They are carefully made of brass. For pressure up to 200 pounds.

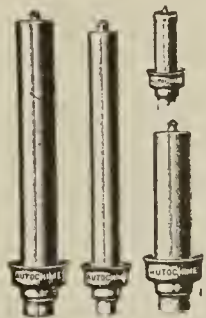
The lever has a long movement and the valve stem is designed so that a slight movement of the lever will permit a small amount of pressure to enter the whistle.



| Size of Pipe Thread, Inches | Weight Each, Lbs. | Each |
|-----------------------------------|-------------------------|--------|
| 1/4 | 3/4 | \$3.45 |
| 3/8 | 7/8 | 3.75 |
| 1/2 | 1 | 4.80 |
| 3/4 | 1 1/4 | 6.45 |
| 1 | 1 3/4 | 12.75 |

AIR WHISTLES

AUTO CHIME



For air or burned gas pressure, the small diameter causes it to blow easily at low pressure and its length gives it the deep and powerful tone.

The cup shape bell extends over the sound openings and besides having a megaphone effect blends and deepens the tones. It is tuned to the first, third and fifth notes of the harmonic scale. Made of brass, polished. Inlet is tapped for 1/2 inch pipe.

| Nos. | Size | Size, Inches | Weight Each, Lbs. | Each |
|------|----------------|-----------------|----------------------|---------|
| 51 | Senior | 2 x 15 | 3 3/4 | \$10.00 |
| 52 | Yacht Special | 1 1/2 x 15 | 2 5/8 | 9.25 |
| 53 | Junior | 2 x 9 | 2 1/2 | 8.00 |
| 54 | Launch Special | 1 1/2 x 8 | 1 5/8 | 7.25 |
| 55 | Midget | 1 1/4 x 5 | 7/8 | 5.75 |

HOLMAN

FOR AIR OR BURNED GAS PRESSURE

The distinguishing feature of this whistle is its fine tone and ease with which it may be instantly adjusted to any air pressure simply by using a screw driver. By loosening the set screws in the collar and either raising or lowering the tube in collar, a deep, clear sound is obtained. Use no pipe larger than 1/2 inch for the air line and no more elbows than is absolutely necessary; place whistle as near tank as possible; to keep whistle up to its proper efficiency, a small quantity of gasoline should be poured into the deflecting cup at intervals so as to cut any particles of grease that may have accumulated.

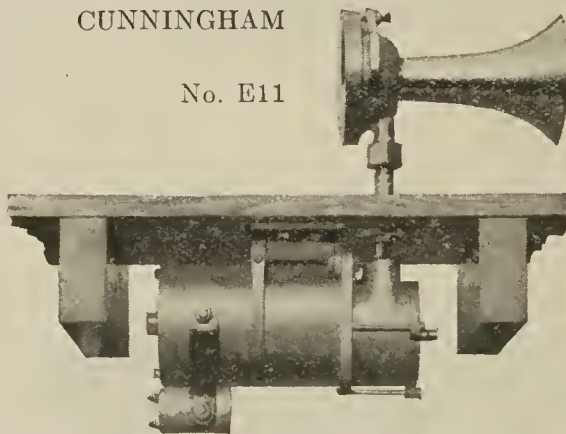


| Nos. | Length Overall, Inches | Length Bell, Inches | Diameter Bell, Inches | Size Inlet Pipe, Inches | Weight Each, Lbs. | Each |
|------|------------------------------|---------------------------|-----------------------------|-------------------------------|-------------------------|--------|
| 1 | 20 | 15 | 1 1/8 | 1/2 | 1 3/4 | \$6.25 |
| 2 | 20 | 17 | 2 | 1 | 6 | 13.00 |
| 3 | 21 1/4 | 19 | 3 | 1 1/2 | 8 3/4 | 21.00 |

ELECTRIC AIR WHISTLES

CUNNINGHAM

No. E11



Consists of a new type of air compressor driven by an electric motor with the whistle directly connected. The motor is controlled by a magnetic switch operated by a push button. This unit can be furnished with either 6 or 12 volt motor.

| Whistles, Nos. | Outfits, Each |
|----------------|---------------|
| 1 | \$50.00 |
| 1 S | 52.00 |
| 2 | 55.00 |
| 2 B | 75.00 |

Whistle Signals for Power Vessels

One blast means, "I am directing my course to starboard."

Two blasts mean, "I am directing my course to port."

Three blasts mean, "My engines are going full speed astern."

Five or more blasts are a danger signal.

Every signal must be answered either with the same signal or the danger signal.

It is both dangerous and unlawful to give "cross signals"; for instance, to give two blasts in answer to one.

COMBINATION LIGHTS

FOR OUTBOARD MOTOR BOATS
WROUGHT BRASS—ELECTRIC

A small, neat, and practical marine light especially designed for outboard motor boats. Guaranteed to pass inspection. Complete with red and green fresnel lenses and double contact electric socket.

Fig. 485

| Height Over-All, Inches | Diameter Body, Inches | Diameter Base, Inches | Size Lens, Inches | Weight, Lbs. |
|-------------------------------|-----------------------------|-----------------------------|-------------------------|--------------------|
| 4 1/2 | 2 1/2 | 2 | 2 1/2 x 3 | 1 |
| Polished Brass | | Each Nickel Plated | | Chromium Plated |
| \$3.75 | | \$4.00 | | \$5.50 |

WITH DECK BRACKET FOR
DEMOUNTING

Quickly removed from deck without necessity of removing screws from deck. Complete with red and green fresnel lenses and double contact electric socket.

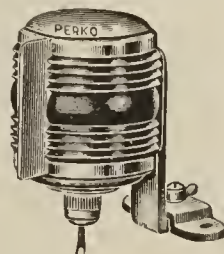


Fig. 486

| Height, Inches | Diameter, Inches | Lens, Inches | Weight Lbs. |
|-------------------|---------------------|--------------------------|--------------------|
| 4 | 2 1/2 | 2 1/2 x 3 | 1 |
| Polished Brass | | Each Nickel Plated | Chromium Plated |
| \$3.75 | | \$4.00 | \$5.50 |

COMBINATION LIGHT AND BITT

FOR OUTBOARD MOTOR
BOATS AND SMALL
RUNABOUTS

One solid casting throughout. A good substantial bitt. Contains our patented rebulbing feature, as illustrated.

It is not necessary to remove lamp from deck to change bulb.

Fig. 510

| Height, Inches | Base, Inches | Lens, Inches | Flagpole Socket, Inch | Weight, Lbs. |
|-------------------|-----------------|--------------------------|-----------------------------|--------------------|
| 5 3/8 | 4 7/8 x 4 7/8 | 2 1/2 x 3 | 7/8 | 8 1/2 |
| Polished Brass | | Each Nickel Plated | Nickel Silver | Chromium Plated |
| \$8.00 | | \$9.00 | \$9.00 | \$11.00 |

FLAG POLE LIGHTS

ELECTRIC ONLY—MAHOGANY POLE
FOR OUTBOARD MOTOR BOATS AND
SMALL RUNABOUTS

An extra small size fresnel globe, 1 3/8-inch diameter, just large enough to admit a 3 c. p. electric bulb. Fitted on our high grade solid mahogany flag pole, which is drilled through center for wires.

Fig. 602

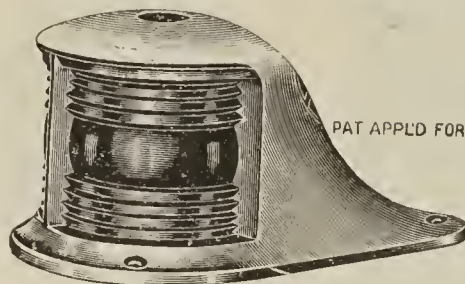
| Length Over-All, Inches | Diam. Base, Inches | Weight, Ounces | Polished Brass | Each Nickel Plated | Chromium Plated |
|-------------------------------|--------------------------|-------------------|-------------------|--------------------------|--------------------|
| 24 | 3/4 | 8 | \$4.00 | \$4.50 | \$5.00 |
| 30 | 3/4 | 9 | 4.25 | 4.75 | 5.25 |



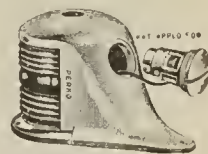
COMBINATION LIGHTS

FOR CLASS 1 BOATS
STREAMLINE

Cast bronze and cast nickel silver. Contains rebulbing feature, as illustrated. Double contact electric socket.



PAT APPL'D FOR



Rear view showing method of changing bulb

FOR OUTBOARD MOTOR BOATS

No. 512

| Height, Inches | Base, Inches | Lens, Inches | Flagpole Socket, Inch | Weight, Lbs. |
|--------------------|-----------------|--------------------------|-----------------------------|----------------------|
| 3 1/8 | 3 3/8 x 5 3/4 | 2 1/2 x 3 | 5/8 | 1 3/4 |
| Polished Bronze | | Each Nickel Plated | Nickel Silver | Polished Aluminum |
| \$5.50 | | \$6.00 | \$6.00 | \$5.50 |

FOR SMALL RUNABOUTS—16 TO 20 FEET LONG

No. 598

| Height, Inches | Base, Inches | Lens, Inches | Flagpole Socket, Inch | Weight, Lbs. |
|--------------------|-----------------|--------------------------|-----------------------------|--------------------|
| 3 3/4 | 4 7/8 x 8 | 2 1/2 x 3 | 1 | 2 1/2 |
| Polished Bronze | | Each Nickel Plated | Nickel Silver | Chromium Plated |
| \$6.50 | | \$7.00 | \$7.00 | \$9.00 |

FOR CLASS 1 BOATS—20 TO 25 FEET LONG

No. 559

| Height, Inches | Base, Inches | Lens, Inches | Weight, Lbs. |
|--------------------|-----------------|--------------------------|--------------------|
| 4 3/8 | 8 3/4 x 5 1/2 | 3 3/8 x 3 7/8 | 4 3/4 |
| Polished Bronze | | Each Nickel Plated | Chromium Plated |
| \$11.50 | | \$12.00 | \$14.50 |

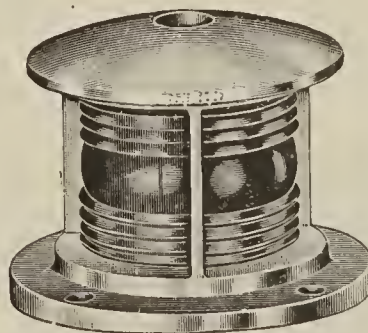
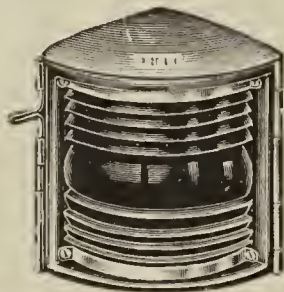
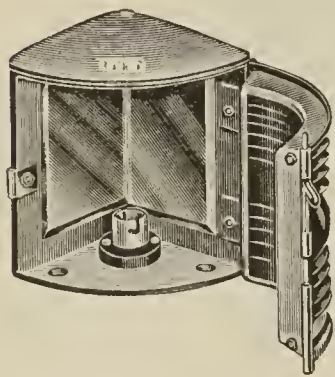
COMBINATION POST LIGHT AND
RIDING BITT

Fig. 502—Closed

| Height, Inches | Diameter Base, Inches | Size Lens, Inches | Flagpole Socket, Inches | Weight, Lbs. |
|--------------------|-----------------------------|--------------------------|-------------------------------|--------------------|
| 4 7/8 | 6 1/2 | 3 3/8 x 3 7/8 | 1 or 1 1/4 | 5 1/2 |
| Polished Bronze | | Each Nickel Plated | Nickel Silver | Chromium Plated |
| \$12.00 | | \$13.00 | \$13.00 | \$15.00 |

Furnished with standard screw electric sockets at above prices if desired.

SIDE LIGHTS ELECTRIC ONLY



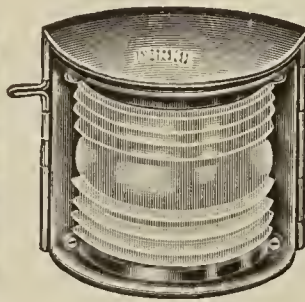
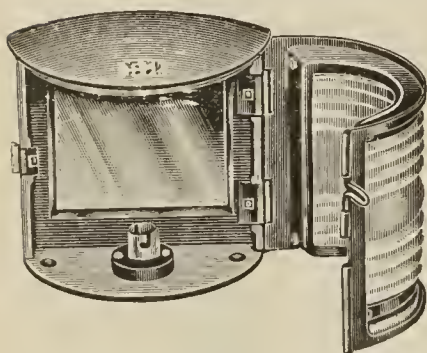
Open Fig. 504

Closed

| | Height, Inches | Angle, Inches | Lens, Inches | Weight per Pair, Lbs. |
|----------|--------------------|------------------|--------------------|-----------------------------|
| Class 2 | 5 1/2 | 3 3/4 x 3 3/4 | 4 1/4 x 4 3/4 | 6 1/2 |
| Class 3 | 6 | 4 x 4 | 5 1/4 x 5 5/8 | 8 |
| Per Pair | | | | |
| | Polished Bronze | Nickel Plated | Chromium Plated | Nickel Silver |
| Class 2 | \$10.00 | \$12.00 | \$14.00 | \$11.00 |
| Class 3 | 13.00 | 15.00 | 17.00 | 14.00 |

Furnished with standard screw electric sockets if desired at above prices.

DE-LITE CAST BOW LIGHTS ELECTRIC ONLY



Open Fig. 505

Closed

| | Height, Inches | Width, Inches | Lens, Inches | Weight, Lbs. |
|---------|--------------------|------------------|--------------------|------------------|
| Class 2 | 5 1/2 | 5 1/2 | 4 1/4 x 6 1/2 | 3 1/4 |
| Class 3 | 6 1/2 | 6 | 5 1/4 x 7 3/4 | 4 1/4 |
| Each | | | | |
| | Polished Bronze | Nickel Plated | Chromium Plated | Nickel Silver |
| Class 2 | \$5.00 | \$6.00 | \$7.00 | \$5.50 |
| Class 3 | 6.50 | 7.50 | 8.50 | 7.00 |

Furnished with standard screw electric sockets if desired at above prices.

STREAMLINE SIDELIGHTS

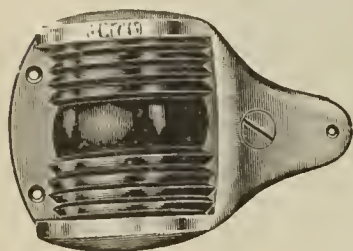


Fig. 563

ELECTRIC

The rebulbing feature makes it unnecessary to remove light to change the bulb. These lights are furnished in pairs for port and starboard. One Red and one Green, fresnel lens and double contact electric socket.

| | Height, Inches | Length, Inches | Size Lens, Inches | Weight per Pair, Lbs. |
|----------|--------------------|-------------------|----------------------|-----------------------------|
| Class 1 | 4 1/16 | 6 | 3 3/8 x 3 7/8 | 3 |
| Class 2 | 5 1/8 | 7 1/2 | 4 1/4 x 4 3/4 | 5 |
| Class 3 | 6 | 9 1/4 | 5 1/4 x 5 5/8 | 7 |
| Per Pair | | | | |
| | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
| Class 1 | \$10.00 | \$11.00 | \$11.00 | \$13.50 |
| Class 2 | 12.00 | 13.00 | 13.00 | 16.00 |
| Class 3 | 18.00 | 20.00 | 20.00 | 22.50 |

BOW LIGHTS STREAMLINE ELECTRIC

FOR
CLASSES
1, 2 OR 3

With re-bulbing feature. Clear fresnel lens, double contact electric socket, flagpole socket in top of light.

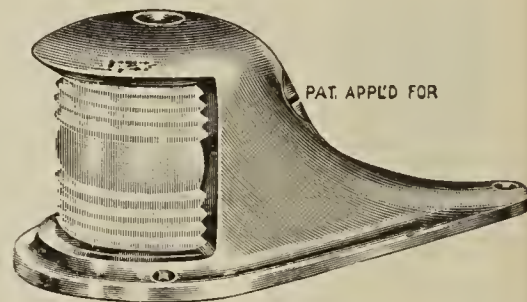


Fig. 561

| | Height, Inches | Base, Inches | Lens, Inches | Weight Lbs. | Flagpole Socket, Inches |
|---------|--------------------|------------------|------------------|--------------------|-------------------------------|
| Class 1 | 4 3/8 | 5 x 8 1/2 | 3 1/8 x 3 1/2 | 4 | 3/4 |
| Class 2 | 5 | 9 7/8 x 5 5/8 | 4 1/4 x 6 1/2 | 4 3/4 | 1 or 1 1/4 |
| Class 3 | 6 3/8 | 6 5/8 x 13 | 5 1/4 x 7 3/4 | 8 3/4 | 1 or 1 1/4 |
| Each | | | | | |
| | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated | |
| Class 1 | \$9.00 | \$10.00 | \$10.50 | \$12.00 | |
| Class 2 | 11.00 | 12.00 | 12.50 | 14.00 | |
| Class 3 | 16.00 | 17.50 | 18.00 | 20.00 | |

BOW POST LIGHT AND RIDING BITT

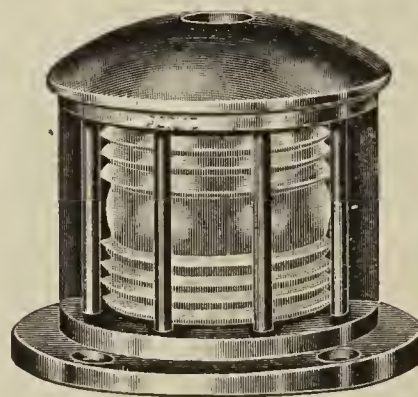


Fig. 503

ELECTRIC FOR CLASS 2 BOATS

Body is cast in one solid piece with threaded top for changing bulb or lens. Lens is fastened by cast wedge which insures a good water-tight fit. Flagpole socket in top, clear fresnel lens and double contact electric socket.

| | Height, Inches | Diam. Base, Inches | Size Lens, Inches | Flagpole Socket, Inches | Weight, Lbs. |
|---------|--------------------|--------------------------|-------------------------|-------------------------------|-----------------|
| Class 2 | 6 1/2 | 7 1/4 | 4 1/4 x 6 1/2 | 1 1/4 | 8 |
| Each | | | | | |
| | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated | |
| Class 2 | \$12.50 | \$14.00 | \$14.00 | \$17.00 | |

Furnished with standard screw electric sockets at above prices if desired.

STERN LIGHT

ELECTRIC CAST BRONZE AND NICKEL SILVER

Equipped with 360 degree fresnel lens and double contact electric socket. Any height desired can be secured by placing required length of 1 inch brass pipe at joint marked A. These parts have standard 1 inch pipe thread.



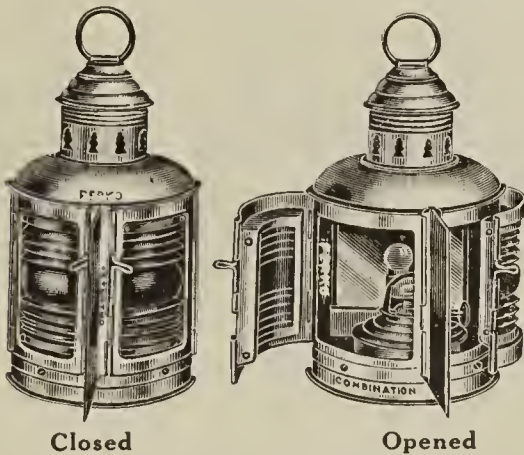
Fig. 375

| | Height, Inches | Diam. Base, Inches | Diam. Body, Inches | Size Lens, Inches | Weight, Lbs. |
|---------|--------------------|--------------------------|--------------------------|-------------------------|-----------------|
| Class 1 | 7 | 3 1/2 | 3 1/2 | 3 3/8 x 3 1/2 | 2 3/4 |
| Each | | | | | |
| | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated | |
| Class 1 | \$7.00 | \$8.00 | \$8.00 | \$9.00 | |

RUNNING LIGHTS

COMBINATION LIGHT—CLASS 1

Oil and Electric



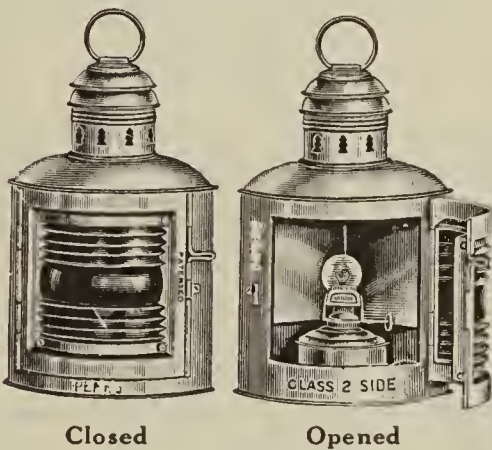
Closed

Opened

No. 0-1—Size of Glass, $3\frac{3}{8} \times 3\frac{3}{8}$ Inches; Height of Frame, $6\frac{1}{4}$ Inches; Height Overall, $9\frac{3}{8}$ Inches; Width, $5 \times 5\frac{1}{2}$ Inches; Weight Each, 3 Lbs.
 Extra for Nickel Plate over brass, \$1.00; for Chromium Plating, \$3.50.

SIDE LIGHTS—CLASS 2

Oil and Electric



Closed

Opened

No. 0-4—Size of Glass, $4\frac{1}{4} \times 4\frac{3}{4}$ Inches; Height of Frame, $7\frac{1}{2}$ Inches; Height Overall, $10\frac{1}{2}$ Inches; Width, $5\frac{1}{4} \times 5\frac{1}{4}$ Inches; Weight per Pair, $6\frac{1}{4}$ Lbs.
 Extra for Nickel Plating over Brass, \$2.00; for Chromium Plating, extra, \$6.00.

SIDE LIGHTS—CLASS 3

No. 0-8—Size of Glass, $5\frac{1}{4} \times 5\frac{5}{8}$ Inches; Height of Frame, $8\frac{5}{8}$ Inches; Height Overall, $12\frac{1}{2}$ Inches; Width, $5\frac{3}{8} \times 5\frac{3}{8}$ Inches; Weight Per Pair, 8 Lbs.
 Extra for Nickel Plating over Brass, \$2.00; for Chromium Plating, extra \$8.30.

Glass on Class 3 is Guarded

Class and Light Information

(a)—Every motor boat of class one shall carry the following lights:

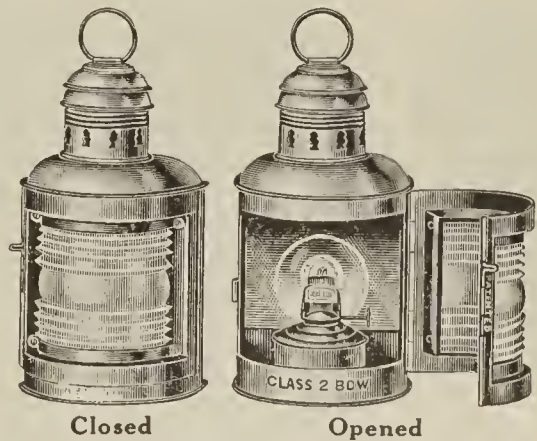
First—A white light aft to show all around the horizon.

Second—A combined lantern in the forepart of the vessel and lower than the white light, aft, showing green to starboard and red to port, so fixed as to throw the light from right ahead to two points abaft the beam on their respective sides.

RUNNING LIGHTS

BOW LIGHTS—CLASS 2

Oil and Electric



Closed

Opened

No. 0-5—Size of Glass, $4\frac{1}{4} \times 6\frac{1}{2}$ Inches; Height of Frame, $7\frac{1}{2}$ Inches; Height Overall, $10\frac{1}{2}$ Inches; Width $5 \times 5\frac{1}{2}$ Inches; Weight Each, 3 Lbs.
 Extra for Nickel Plating over Brass, \$1.00; for Chromium Plating, extra \$3.00.

BOW LIGHTS—CLASS 3

No. 0-9—Size of Glass, $5\frac{1}{4} \times 9\frac{1}{2}$ Inches; Height of Frame, $8\frac{5}{8}$ Inches; Height Overall, $12\frac{1}{2}$ Inches; Width $5\frac{1}{2} \times 6\frac{1}{8}$ Inches; Weight Each, 4 Lbs.
 Extra for Nickel Plating over Brass, \$1.00; for Chromium Plating, extra \$4.15.

Glass on Class 3 is Guarded

STERN LIGHTS—CLASS 1

Oil and Electric

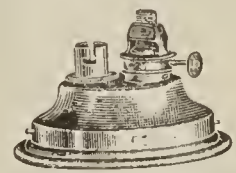
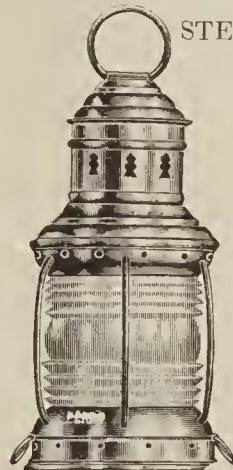


Fig. 586

Size of lens, $3\frac{3}{8} \times 3\frac{1}{2}$ inches.
 Height, less ring, $8\frac{5}{8}$ inches.
 Diameter of base, $4\frac{1}{2}$ inches.
 Weight, each, 2 pounds.

| No. | Each | |
|---|-----------------|----------------|
| | Galvanized Iron | Polished Brass |
| 0-2 With clear lens and 2 in 1 fount. . . . | \$4.30 | \$5.50 |
| With colored lens and 2 in 1 fount. . . | 5.70 | 7.30 |
| Extra founts, Fig. 586. . . . . | .... | 1.50 |

STERN LIGHTS—CLASS 2 AND 3

Oil and Electric

Size of lens, $4\frac{1}{4} \times 4\frac{1}{4}$ inches. Height, less ring, $11\frac{3}{4}$ inches. Diameter of base, $5\frac{5}{8}$ inches. Weight, each, 3 pounds.

| No. | Each | |
|---|-----------------|----------------|
| | Galvanized Iron | Polished Brass |
| 0-6 With clear lens and 2 in 1 fount. . . . | \$5.25 | \$7.00 |
| With colored lens and 2 in 1 fount. . . | 7.25 | 9.00 |
| Extra founts, Fig. 334. . . . . | .... | 1.50 |

Every motor boat of Class 2 and 3 shall carry the following lights:

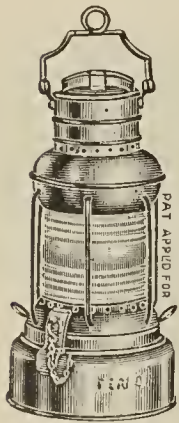
First. A bright white light in the fore part of the vessel as near the stem as practicable, so fixed as to throw the light ten points on each side of the vessel.

Second. A white light aft to show all around the horizon.

Third. On the starboard side a green light and on the port side a red light, both to throw a light from right ahead to two points abaft the beam.

ANCHOR LIGHTS

10-DAY LANTERN



A well constructed lantern guaranteed to burn constantly for at least 10 days with a good grade of kerosene oil. Has a special burner, wick and chimney, solid brass swivel fount with a bail handle on the bottom for turning fount which folds flush with bottom when not in use.

Is fastened with a heavy brass hasp which locks the fount in place, cannot fall out or shake loose; clear fresnel lens.

Fig. 596

| Extreme Height, Inches | Diameter Fount, Inches | Size of Lens, Inches | Net Weight, Lbs. | Each Galvanized | Each Brass |
|------------------------|------------------------|----------------------|------------------|-----------------|------------|
| 14 | 7 | 4 1/4 x 4 1/4 | 4 | \$8.50 | \$10.50 |

With colored lens (red, green or blue), add \$2.00 to above prices.

FLAG POLE LIGHTS

ELECTRIC ONLY—SOLID MAHOGANY POLE

This pole is turned from one solid piece of mahogany and drilled through center for electric wire. Natural finish, varnished, equipped with pole light. With a 2 1/2 inch globe, double contact electric socket. All wired ready for use. Double contact connection plug on end of wire. Threaded base of globe allows easy change of bulb. Brass ferrule on base of pole to prevent splitting or swelling.



Fig. No. 492

| Length Over-All, Inches | Diameter Base, Inches | Polished Brass | Each Nickel Plated | Each Chromium Plated |
|-------------------------|-----------------------|----------------|--------------------|----------------------|
| 20 | 1 or 1 1/4 | \$6.00 | \$6.25 | \$7.25 |
| 24 | 1 or 1 1/4 | 6.25 | 6.50 | 7.50 |
| 30 | 1 or 1 1/4 | 6.35 | 6.60 | 7.60 |
| 36 | 1 or 1 1/4 | 6.50 | 6.75 | 7.75 |
| 42 | 1 or 1 1/4 | 6.60 | 6.85 | 7.85 |
| 48 | 1 1/4 | 6.75 | 7.00 | 8.00 |
| 60 | 1 1/4 | 7.00 | 7.25 | 8.25 |
| 72 | 1 1/4 | 7.50 | 7.75 | 8.75 |

POLE LIGHT ASSEMBLY

COMPLETE WITH FLAG POLE SOCKET AND ELECTRIC CONNECTIONS IN POLE AND SOCKET



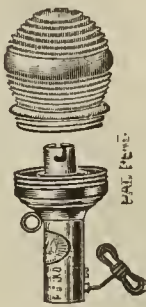
Insert pole in socket and electric connection is complete. No wires exposed, no springs to corrode. A real positive hook-up, unaffected by water or corrosion. Female end of connector is mortised into base of pole, male end fastened securely in flag pole socket. Brass ferrule on base of pole, brass light on top.

Fig. 590

| Length Over-All, Inches | Base of Pole, Inches | Polished Brass | Each Nickel Plated | Each Chromium Plated |
|-------------------------|----------------------|----------------|--------------------|----------------------|
| 20 | 1 or 1 1/4 | \$8.00 | \$9.00 | \$10.25 |
| 24 | 1 or 1 1/4 | 8.25 | 9.25 | 10.50 |
| 30 | 1 or 1 1/4 | 8.50 | 9.50 | 10.75 |
| 36 | 1 or 1 1/4 | 8.75 | 9.75 | 11.00 |
| 42 | 1 or 1 1/4 | 8.85 | 9.85 | 11.10 |
| 48 | 1 1/4 | 9.00 | 10.00 | 11.25 |
| 60 | 1 1/4 | 9.25 | 10.25 | 11.50 |
| 72 | 1 1/4 | 9.50 | 10.50 | 11.75 |

STANDARD POLE LIGHTS

FOR OUTBOARD MOTOR BOATS AND RUNABOUTS



Has clear fresnel ball globe, threaded base, double contact electric socket, wrought brass base. Large opening in globe will take up to 50 c. p. bulb. Complete with 5 ft. waterproof covered wire.

| Outside Diameter Globe, Inches | Height Over-All, Inches | Inside Diameter Neck, Inches | Weight, Ounces |
|--------------------------------|-------------------------|------------------------------|----------------|
| 2 1/2 | 5 | 3/4 | 12 |
| Polished Brass | Each Nickel Plated | Chromium Plated | |
| \$2.50 | \$2.75 | \$3.50 | |

Fig. 482

MAST OR STERN LIGHTS

Made of heavy brass tubing with cast bronze base, 2 1/2 or 3 inch fresnel ball globe, threaded base, double contact electric socket. (Patented).

| Height Over-All, Inches | Diameter Base, Inches | Diameter Globe, Inches | Weight, Ounces |
|-------------------------|-----------------------|------------------------|----------------|
| 7 | 2 3/8 | 2 1/2 or 3 | 12 |
| Polished Brass | Each Nickel Plated | Chromium Plated | |
| \$3.50 | \$3.75 | \$5.00 | |

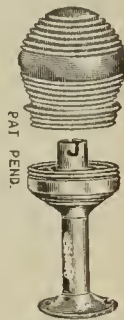


Fig. 422

MAST LIGHTS

CAST BRONZE AND NICKEL SILVER



Equipped with 360 degree clear fresnel lens and double contact electric socket. Extra long neck.

Furnished with standard screw socket at same prices if desired.

Fig. 521

| Height, Inches | Diameter Body, Inches | Size Lens, Inches | Inside Diameter Neck, Inches | Weight, Lbs. |
|-----------------|-----------------------|--------------------|------------------------------|--------------|
| 6 3/4 | 3 1/2 | 3 3/8 x 3 1/2 | 1 1/4 or 1 1/2 | 2 |
| Polished Bronze | Nickel Plated | Each Nickel Silver | Chromium Plated | |
| \$6.50 | \$7.50 | \$7.50 | \$8.50 | |

With red, green or blue lens add \$1.50 to above prices.

MAST TRUCK FIXTURES

Mast-Truck fixture with screw base fresnel globe.

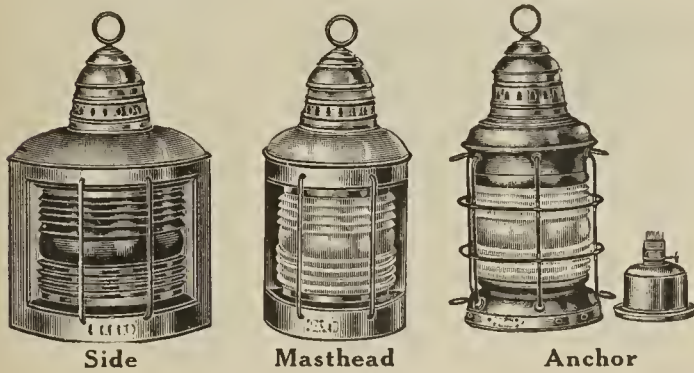
Fig. 60

| Approx. Net Weight | Size Lens, Inches | Total Height, Inches | Width, Inches | Unit |
|--------------------|---------------------|----------------------|---------------|------|
| 2 3/4 lbs. | 5 x 3 3/8 | 8 | 3 3/8 | |
| Brass Unfinished | Each Polished Brass | Chromium Plated | | |
| \$4.50 | \$5.50 | \$7.50 | | |



MARINE LIGHTS

TURRET TOP—OIL AND ELECTRIC



Regulation Size—For Oil

For boats 65 feet long and larger; made of galvanized steel, polished brass or copper; with fresnal glasses, ruby and green, solid colors; swivel or screw founts.

Can be furnished to order with a door at an additional price. Masthead lights also known as towing, range, stern or bow.

SIDE LIGHTS

| Nos. | Size Glass, Inches | Height Overall, Inches | Width, Inches | Weight Each, Lbs. | Galv. | Brass | Copper |
|------|------------------------------------|------------------------|-----------------------------------|-------------------|---------|---------|---------|
| 8 | 5 $\frac{5}{8}$ x 6 $\frac{1}{4}$ | 15 $\frac{1}{2}$ | 6 $\frac{1}{2}$ x 7 $\frac{1}{2}$ | 11 $\frac{1}{2}$ | \$18.00 | \$30.00 | \$42.00 |
| 9 | 5 $\frac{3}{4}$ x 8 $\frac{1}{2}$ | 16 | 6 $\frac{1}{2}$ x 8 | 12 $\frac{1}{2}$ | 20.00 | 35.00 | 46.00 |
| 10 | 6 $\frac{3}{4}$ x 9 | 17 $\frac{1}{2}$ | 7 $\frac{1}{2}$ x 9 | 16 | 22.00 | 37.00 | 50.00 |
| 11 | 7 $\frac{1}{2}$ x 11 $\frac{1}{2}$ | 21 $\frac{1}{4}$ | 9 $\frac{1}{2}$ x 12 | 29 $\frac{1}{2}$ | 34.00 | 50.00 | 60.00 |

Side Lights Nos. 8, 9 and 10, with one electric socket, add \$3.00 to list prices; On Light No. 11, add \$4.00 for 1 light and \$5.00 for 2 lights to list prices.

MASTHEAD LIGHTS

Clear Glass

| Nos. | Size Glass, Inches | Height Overall, Inches | Width, Inches | Weight Each, Lbs. | Galv. | Brass | Copper |
|------|-----------------------------------|------------------------|---------------------|-------------------|---------|---------|---------|
| 14 | 5 $\frac{1}{2}$ x 8 $\frac{3}{4}$ | 16 $\frac{1}{2}$ | 7 x 7 | 5 | \$12.00 | \$18.00 | \$23.00 |
| 15 | 6 $\frac{5}{8}$ x 9 $\frac{1}{2}$ | 17 | 7 $\frac{1}{2}$ x 7 | 7 | 13.50 | 19.00 | 25.00 |
| 16 | 7 x 12 $\frac{1}{2}$ | 21 $\frac{1}{4}$ | 9 x 9 $\frac{1}{2}$ | 12 | 18.00 | 25.00 | 31.00 |

With Ruby, Green or Blue Glasses

| | | | | | | | |
|----|-----------------------------------|------------------|---------------------|----|---------|---------|---------|
| 14 | 5 $\frac{1}{2}$ x 8 $\frac{3}{4}$ | 16 $\frac{1}{2}$ | 7 x 7 | 5 | \$15.00 | \$21.00 | \$26.00 |
| 15 | 6 $\frac{5}{8}$ x 9 $\frac{1}{2}$ | 17 | 7 $\frac{1}{2}$ x 7 | 7 | 17.00 | 22.50 | 28.50 |
| 16 | 7 x 12 $\frac{1}{2}$ | 21 $\frac{1}{4}$ | 9 x 9 $\frac{1}{2}$ | 12 | 23.00 | 30.00 | 36.00 |

Lights Nos. 14 and 15, with 1 electric socket, add \$1.50 to list price. Light No. 16, for one socket, add \$2.00 and for 2 sockets, add \$2.50 to list prices.

ANCHOR OR RIDING LIGHTS

Clear Glass

| Nos. | Size Glass, Inches | Height Overall, Inches | Diam., Inches | Weight Each, Lbs. | Galv. | Brass | Copper |
|------------------|---------------------|------------------------|-----------------|-------------------|---------|---------|---------|
| 22 | 5 $\frac{3}{8}$ x 6 | 17 | 7 $\frac{1}{2}$ | 8 | \$12.00 | \$19.00 | \$25.00 |
| 22 $\frac{1}{2}$ | 6 x 6 $\frac{5}{8}$ | 18 $\frac{1}{2}$ | 7 $\frac{1}{2}$ | 9 | 14.00 | 20.00 | 27.00 |
| 23 | 7 x 8 | 21 $\frac{1}{2}$ | 9 $\frac{1}{2}$ | 16 | 18.00 | 26.50 | 34.00 |

With Ruby, Green or Blue Glasses

| | | | | | | | |
|------------------|---------------------|------------------|-----------------|----|---------|---------|---------|
| 22 | 5 $\frac{3}{8}$ x 6 | 17 | 7 $\frac{1}{2}$ | 8 | \$15.00 | \$22.00 | \$28.00 |
| 22 $\frac{1}{2}$ | 6 x 6 $\frac{5}{8}$ | 18 $\frac{1}{2}$ | 7 $\frac{1}{2}$ | 9 | 17.50 | 23.50 | 30.50 |
| 23 | 7 x 8 | 21 $\frac{1}{2}$ | 9 $\frac{1}{2}$ | 16 | 23.00 | 31.50 | 39.00 |

Note—All lights are furnished with a wick.

Lights Nos. 22 and 22 $\frac{1}{2}$, add \$1.50 to lists for 1 socket; On light No. 23, add \$2.00 for 1 socket and \$2.50 for two sockets.

RUNNING LAMP FOUNTS

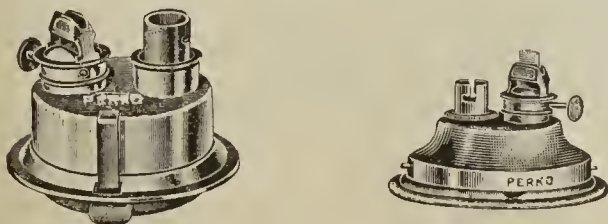


Fig. 334

Fig. 586

No. 334—Classes 1-2-3 Side and Bow.....\$1.50
No. 586—Class 1 Anchor 1.50

RUNNING LAMP FOUNTS



Fig. 582

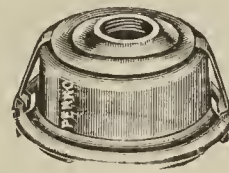


Fig. 286

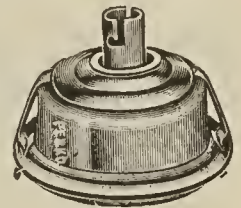


Fig. 291

| Nos. | | | Diameter of Fount, Inches | Per Dozen |
|------|---------|---------------|---------------------------|-----------|
| 582 | De Lite | Classes 1-2-3 | 2 $\frac{3}{4}$ | \$8.00 |
| 286 | Oil | Classes 2-3 | 3 $\frac{3}{4}$ | 8.00 |
| 291 | Ediswan | Classes 2-3 | 3 $\frac{3}{4}$ | 12.00 |

FRESNAL GLASSES



FOR COMBINATION AND SIDE LIGHTS

In ordering, give height overall and distance across the face of bullseye; also specify color of glass.

| Style of Light | Height, Inches | Distance Across Face of Bullseye, Inches | Ruby Each | Green Each |
|-----------------|-----------------|--|-----------|------------|
| Combination | 3 $\frac{3}{8}$ | 3 $\frac{7}{8}$ | \$1.00 | \$1.00 |
| Class 2, Side | 4 $\frac{1}{4}$ | 4 $\frac{3}{4}$ | 1.80 | 1.80 |
| Class 3, Side | 5 $\frac{1}{4}$ | 5 $\frac{1}{4}$ | 2.70 | 2.70 |
| No. 8, Side | 5 $\frac{1}{2}$ | 6 | 2.70 | 2.70 |
| No. 9 | 5 $\frac{3}{4}$ | 8 $\frac{1}{2}$ | 3.70 | 3.70 |
| No. 10 | 6 $\frac{3}{4}$ | 9 | 4.20 | 4.20 |
| No. 11 | 7 $\frac{1}{2}$ | 11 $\frac{1}{2}$ | 8.00 | 8.00 |
| Eight Inch Face | 8 $\frac{7}{8}$ | 9 $\frac{3}{4}$ | 8.00 | 8.00 |

FOR BOW AND MASTHEAD LIGHTS

In ordering, give height overall, distance across the face of bullseye and diameter of the back on the outside; also specify whether clear or if colored whether ruby, green or blue.



| Style of Light | Height, Inches | Distance Across Face of Bullseye, Inches | Diam. Back, Inches | Clear Each | Colored Each |
|-----------------|-----------------|--|--------------------|------------|--------------|
| Class 2, Bow | 4 $\frac{1}{4}$ | 6 $\frac{1}{2}$ | 4 | \$2.00 | \$3.00 |
| Class 3, Bow | 5 $\frac{1}{4}$ | 5 $\frac{5}{8}$ | 4 $\frac{1}{2}$ | 3.00 | 4.00 |
| No. 14, Bow | 5 $\frac{1}{2}$ | 8 $\frac{3}{4}$ | 5 $\frac{1}{2}$ | 4.00 | 5.00 |
| No. 15, Bow | 6 $\frac{5}{8}$ | 9 $\frac{1}{2}$ | 6 | 5.00 | 6.00 |
| No. 16, Bow | 7 | 12 $\frac{1}{2}$ | 8 | 6.00 | 8.00 |
| Eight Inch Face | 8 $\frac{7}{8}$ | 9 $\frac{3}{4}$ | 8 $\frac{1}{2}$ | 7.00 | 9.00 |



FOR ANCHOR LIGHTS

In ordering, give height overall, diameter overall, including outside ribs.

Also specify whether clear, or if colored, whether ruby, green or blue.

| Style of Light | Height, Inches | Diameter, Inches | Clear Each | Colored Each |
|-------------------------------|-----------------|------------------|------------|--------------|
| Stern | 3 $\frac{3}{8}$ | 3 $\frac{1}{2}$ | \$1.50 | \$2.40 |
| No. 21, Anchor | 4 $\frac{1}{4}$ | 4 $\frac{1}{4}$ | 1.80 | 3.60 |
| No. 22, Anchor | 5 $\frac{7}{8}$ | 6 | 3.00 | 5.50 |
| No. 22 $\frac{1}{2}$, Anchor | 6 $\frac{5}{8}$ | 6 | 4.00 | 7.00 |
| No. 23, Anchor | 7 | 8 | 5.60 | 10.50 |

CABIN LIGHTING FIXTURES

ONE LIGHT



Brass bracket with holophane globe; Edison base, double contact socket; furnished with pull chain, turn switch or without a switch; polished finish. Weight each, 1 pound.

Fig. 81

| | Each Polished Brass | Nickel Plated | Chromium Plated |
|--------------|---------------------------|------------------|--------------------|
| Pull Chain | \$5.00 | \$5.50 | \$6.00 |
| Throw Switch | 3.50 | 4.00 | 4.50 |

ONE LIGHT

Brass bracket with holophane shade; Edison base, double contact; furnished with pull chain, turn switch or without a switch; polished finish.

Fig. 83

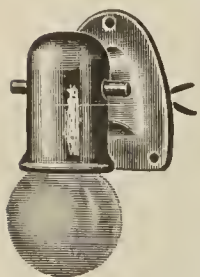
| | Each Polished Brass | Nickel Plated | Chromium Plated |
|--------------|---------------------------|------------------|--------------------|
| Pull Chain | \$4.50 | \$5.00 | \$5.50 |
| Throw Switch | 3.00 | 3.50 | 4.00 |



All Above, One in a Box

Note: Above prices include holophane globe or shade but do not include electric bulb.

PUSH BUTTON SWITCH—STANDARD SCREW SOCKET—CAST BRONZE



Wired ready for use for any voltage from 6 to 120.

Size base, 2 3/4 x 2 3/8 inches.

Drop (less lamp), 2 1/2 inches.

Extends from wall, 2 5/8 inches.

Weight, 8 ounces.

Fig. 516

| | Each Polished Bronze | Nickel Plated | Chromium Plated |
|--|----------------------------|------------------|--------------------|
| | \$2.50 | \$2.75 | \$3.75 |

CAST BRONZE—STANDARD SCREW SOCKET

Single

Wired for any voltage from 6 to 120, standard socket (Edison base).

Complete with toggle switch.

Base, 2x2 inches.

Drop (less lamp), 2 inches.

Projection (less lamps), 2 5/8 inches.

Weight, 3/4 pound.

Fig. 450

| | Each Polished Bronze | Nickel Plated | Chromium Plated |
|--------------------|----------------------------|------------------|--------------------|
| With Toggle Switch | \$2.50 | \$2.75 | \$3.50 |
| Without Switch | 2.25 | 2.50 | 3.25 |



CAST BRONZE—STANDARD SCREW SOCKET

Upright—Single

A cast bronze fixture, with a standard screw base socket and toggle switch. A shade can be used with this type fixture.

Base, 2 5/8 x 4 1/2 inches.

Projection, 2 5/8 inches.

Weight, 1 pound.

Fig. 304

| | Each Polished Bronze | Nickel Plated | Chromium Plated |
|-------------|----------------------------|------------------|--------------------|
| With Switch | \$3.50 | \$4.00 | \$4.50 |

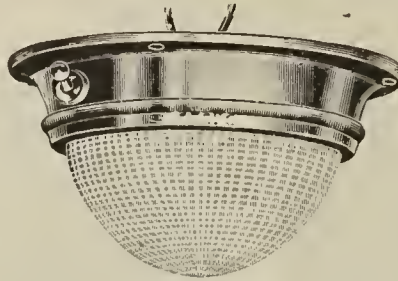
SMOKE BELLS

All Brass with Arm \$1.10

LIP LAMP CHIMNEYS

| | Per Dozen |
|------------------------------------|-----------|
| For No. 1 Burners; 1 1/2 Ins. | \$3.50 |
| For No. 2 Burners; 2 1/4 Ins. | 4.50 |

DOME LIGHTS

CAST BRONZE
AND NICKEL
SILVER

With improved toggle switch and nickel plated reflector. Globe held in place by threaded collar and protected from breakage by two rubber gaskets.

No. 1, fitted with double contact socket.

No. 2, fitted with standard screw socket.

WITH DEEP HOLOPHANE GLOBE

Fig. 454

| Nos. | Diam. Base, Inches | Depth, Inches | Diam. Globe, Inches | Weight, Lbs. |
|------|--------------------------|------------------|---------------------------|-----------------|
| 1 | 5 | 3 | 4 | 2 1/2 |
| 2 | 8 | 4 1/4 | 6 | 4 1/2 |

| Nos. | Each Polished Bronze | Nickel Plated | Chromium Plated |
|------|----------------------------|------------------|--------------------|
| 1 | \$6.50 | \$7.00 | \$8.00 |
| 2 | 10.00 | 10.75 | 12.00 |

WITH SHALLOW HOLOPHANE GLOBE

Made of cast bronze with an improved toggle switch. Globe held in place by threaded collar and has two rubber gaskets.

No. 3 Dble. contact socket.

No. 4 Standard screw.

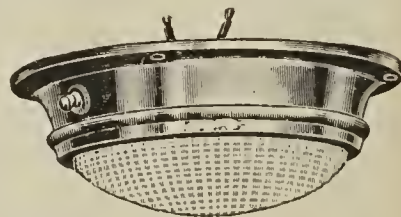


Fig. 555

| Nos. | Diam. Base, Inches | Depth, Inches | Diam. Globe, Inches | Weight Lbs. |
|------|--------------------------|------------------|---------------------------|----------------|
| 3 | 5 | 1 3/4 | 4 | 2 1/4 |
| 4 | 8 | 2 7/8 | 6 | 4 1/4 |

| Nos. | Each Polished Bronze | Nickel Plated | Chromium Plated |
|------|----------------------------|------------------|--------------------|
| 3 | \$6.50 | \$7.00 | \$8.00 |
| 4 | 10.00 | 10.75 | 12.00 |

WROUGHT BRASS — IMPROVED — DOUBLE CONTACT SOCKETS—WITH THROW SWITCH



Made of high grade low brass, guaranteed not to crack due to weather conditions or changes. Reflectors are heavily nickel plated, with holophane globes and double contact sockets. All wired ready for installation.

Fig. 387

| Diam. Glass, Inches | Diam. Base, Inches | Depth Over-All, Inches | Polished Brass | Each Nickel Plated | Chromium Plated |
|---------------------------|--------------------------|------------------------------|-------------------|--------------------------|--------------------|
| 2 3/4 | 4 5/16 | 1 7/8 | \$2.00 | \$2.25 | \$3.50 |
| 3 3/4 | 5 3/4 | 1 7/8 | 2.50 | 2.75 | 4.00 |
| 4 3/4 | 6 7/8 | 2 3/4 | 3.00 | 3.25 | 4.50 |
| 5 3/4 | 8 | 2 3/4 | 4.00 | 4.25 | 5.50 |

CABIN OIL LAMPS

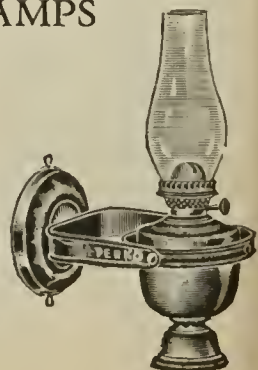
DOUBLE SWINGING

Made of solid brass or copper; has a one piece reservoir with oil feeder cap; No. 2 brass hinge burner; chimney; can be used as a table lamp.

Fig. 138

| Nos. | Capa- city, Pints | Extends From Wall, Inches | Weight Each Lbs. | Brass Each |
|------|-------------------------|---------------------------------|------------------------|---------------|
| 1 | 1 | 8 | 3 | \$5.00 |
| 2 | 1 1/4 | 9 1/2 | 3 1/2 | 6.00 |

All Above, One in a Carton



MARINE SEARCHLIGHTS

"HALF-MILE RAY"



No. 100



No. 300-A



No. 200

| | |
|---|---------|
| No. 100—Clamp or Screw Bracket | \$18.00 |
| No. 100-H—For Hand Use, no Brackets..... | 18.00 |
| No. 200—Deck Mounting | 20.00 |
| For Full Chrome Finish, Add..... | 7.50 |
| No. 300-A—Cabin Control | 22.50 |
| No. 300-R—Remote Control | 45.00 |
| For Full Chrome Finish, Add | 7.50 |
| Slip Cover for No. 300-A, Black | 2.50 |
| Slip Cover for No. 300-A, Canvas | 3.50 |
| Standard Finish is Black with Nickel or Brass Trim. | |
| Full Brass or Nickel Finish, Extra..... | 2.50 |

Furnished in 6-12-32 volts.

Specify Voltage and Finish When Ordering

"HALF-MILE RAY"

These Lights have the same powerful eight-inch reflector as those shown above. The reflector is mounted in a brass drum. The construction throughout is exceptionally heavy, all parts being designed for the hardest possible usage.

The improved No. 800-A has gear control giving fine adjustment and quick, even motion.

| | |
|-----------------------------|---------|
| No. 800—Deck Mounting .. | \$35.00 |
| No. 800-A—Cabin Control.. | 60.00 |
| Chromium Finish, Extra..... | 15.00 |
| Canvas Slip Cover | 6.00 |

Standard finish, brass or buff enamel.
Furnished in 6-12-32 volts.



No. 800-A

Specify Voltage and Finish When Ordering

"ONE-MILE RAY"

FULL DRUM SHAPE

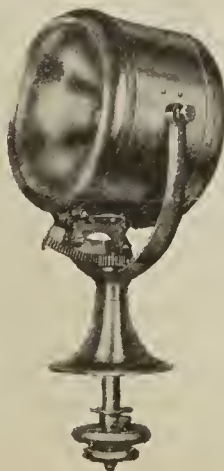
| | |
|--------------------------|---------|
| No. 700—Deck Mounting, | |
| 10" Diameter | \$60.00 |
| No. 700-A—Cabin Control | |
| 10" Diameter | 100.00 |
| No. 750-A—Cabin Control, | |
| 12" Diameter | 125.00 |

SEMI-DRUM SHAPE

| | |
|--------------------------|----------|
| No. 500—Deck Mounting, | |
| 10" Diameter | \$ 50.00 |
| No. 500-A—Cabin Control | |
| 10" Diameter | 85.00 |
| No. 550-A—Cabin Control | |
| 11 1/4" Diameter | 110.00 |
| Chromium Finish, Extra.. | 15.00 |
| Canvas Slip Cover | 6.00 |

Standard finish, brass or buff enamel.
Furnished in 6-12-32 volts.

Specify Voltage and Finish When Ordering



No. 700-A

MARINE SEARCHLIGHTS

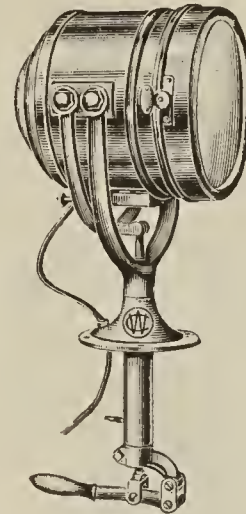
LEBBY

CABIN CONTROL TYPE

For outside mounting and inside cabin control; throws an exceptionally powerful beam of light; operates very smoothly; is built to stand up under the most severe conditions and is easily focused; bulb mounting is adjustable, permitting instant widening or narrowing of the beam.

Made of solid brass with patented compensated mirror projector; regularly furnished in polished brass; when ordering, always specify voltage; can be furnished 6, 12, 32 or 110 volts.

| Size, Inches | Height, Inches | Range, Mile | Each |
|-----------------|-------------------|----------------|---------|
| 7 | 20 | 1/2 | \$63.00 |
| 10 | 24 | 2/3 | 105.00 |
| 14 | 31 | 1 | 180.00 |

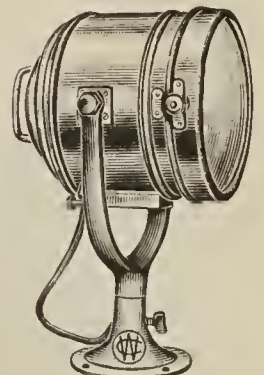
Size,
Inches7
10
14Extra for
Nickel Plating,
Each\$4.00
5.00
6.00Extra for
Chromium Plating
Each\$10.00
12.00
14.00

DECK TYPE

For mounting outside on the deck; has handle on the back for controlling; throws an exceptionally powerful beam of light; operates very smoothly and is easily focused; bulb mounting is adjustable, permitting instant widening or narrowing of the beam.

Made of solid brass with patented compensated mirror projector; regularly furnished in polished brass; when ordering, always specify voltage; can be furnished in 6, 12, 32 or 110 volts.

| Size, Inches | Height, Inches | Range, Mile | Each |
|-----------------|-------------------|----------------|---------|
| 7 | 20 | 1/2 | \$56.00 |
| 10 | 24 | 2/3 | 90.00 |
| 14 | 31 | 1 | 180.00 |

Size,
Inches7
10
14Extra for
Nickel Plating,
Each\$3.00
4.00
5.00Extra for
Chromium Plating,
Each\$8.00
10.00
12.00

PATHFINDER SEARCHLIGHT

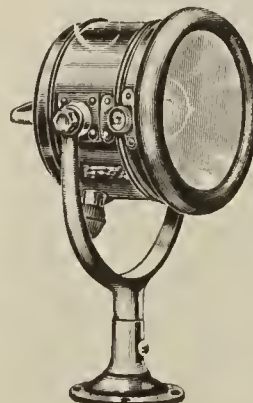


Fig. 299

Made from heavy brass with bronze casting, silver plated reflectors. D. C. sockets. Adjustable beam. Advise voltage wanted.

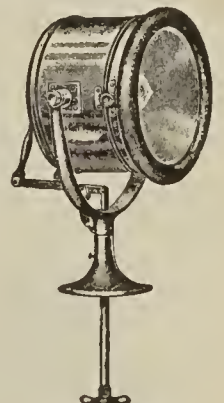


Fig. 298

PRICE EACH

| | Polished Brass | Nickel Plated | Chromium Plated |
|-------------------------|-------------------|------------------|--------------------|
| 5-Inch Deck Type | \$12.00 | \$13.25 | \$19.00 |
| 5-Inch Pilot House Type | 24.00 | 26.50 | 38.50 |
| 8-Inch Deck Type | 33.60 | 37.00 | 47.00 |
| 8-Inch Pilot House Type | 42.00 | 46.50 | 56.50 |

MARINE WATER CLOSETS

No. 4042—WINNER

A very popular pump water closet, vitro-adamant round flushing rim hopper bowl; 2½ inch combined cast composition supply and waste pump; quick opening supply valve, patent back water check valve; pump is rough, finished trimmings. Occupies a space 17 inches wide, 20½ inches front to back and 13 inches deck

to top of seat and has a ¾ inch intake and a 1½ inch discharge.

Each

No. 4042—With Oak Seat and Cover.....\$39.75

No. 4043—With Mahogany Seat and Cover..... 39.75

No. 4044—With Cellu-White Seat and Cover..... 42.75

KNOCKABOUT

A very efficient and small pump water closet. Has a vitro-adamant round hopper bowl with a two and one half inch combined supply and waste pump; also has a safety patented automatic supply valve, patent backwater check valve; pump is rough with finished trimmings. It occupies a space 18

inches wide, 20 inches front to back and 14 inches deck to top and has a ¾ intake and a 1½ inch discharge. For small cruisers and boats with limited space.

Each

R-4030—With Oak Seat and Cover, Wgt. 42 Lbs. \$68.00

R-4031—With Mahogany Seat and Cover..... 71.50

R-4035—With Cellu-White Seat and Cover.

Chromium Plated Fittings, White Pump..... 80.00

ELECTRIC WATER CLOSETS

LEE

Heavy vitreous china bowl with platform in rear cast integral for supporting the flushing mechanism, which, with the exception of motor is made of brass and bronze. Supply and discharge pipes pass through base, eliminating all exposed pipes. Mechanism consists of two small, powerful

centrifugal pumps directly connected to an electric motor. The valves are automatic in their action and require no manipulation as in the old hand pump closet. Motor is of standard make and small current consumption (about 8 amperes on a 32 volt circuit or 2½ amperes on 110 volts). Operates by simply pushing the button.

Easy to install; after cutting holes in the floor for pipes to pass it is simply necessary to bolt bowl to floor and connect electric wires. For 32 or 110 volts.

Height of bowl, 14¾ inches; depth, 22 inches; width 15½ inches.

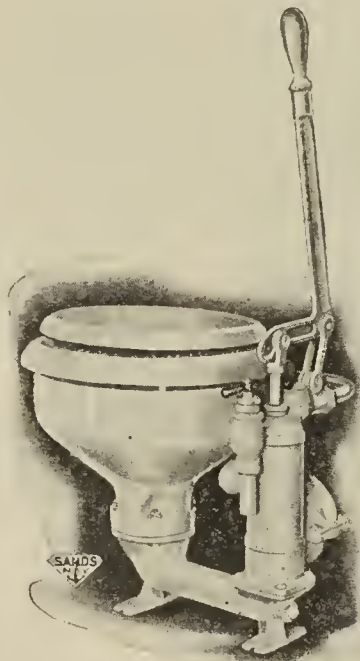
Each

Lee—With Oak or Mahogany Seat; Weight Each, 105 Lbs.\$295.00

Lee—With White Cello Seat; Weight Each, 105 Lbs. 301.00

MARINE WATER CLOSETS

R4046—"WINSTED"



This type Pump Water Closet can be used above or below the water line; has a white vitreous china round flushing rim bowl; bronze two and one-half inch combined supply and discharge pump, cast malleable bronze vertical handle with white finished wood grip. Lever handle quick opening supply valve.

Cellu-white seat and cover with chromium plated brass post hinges and heavy rubber seat bumpers. Pump finished white with chromium plated trimmings. Width overall, 17 inches; depth, 17 inches; height to top of seat, 15 inches; supply connection ¾-inch.

Discharge connection, 1½ inches—Net weight, 40 pounds.

Regularly furnished with pump on right side when facing. Can be furnished with pump on left side when specified.

Each

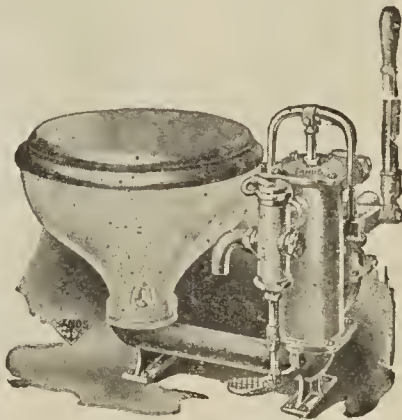
Complete\$48.50

SPEDIT

A special Spedit pump water closet for use on cruisers, yachts, etc.; has a vitro-adamant flushing rim hopper bowl with a 2½ inch combined supply and waste pump, a patented safety supply foot valve and a patented backwater check valve. Pump is finished in white enamel with nickel plated trimmings; furnished with an oak seat and cover. It occupies a space 21 inches wide, 19½ inches from front to back and 14 inches from deck to top. Has a ¾ inch intake with a 1½ inch discharge. A special light weight fixture for speedy craft.

Each

R-4023—Weight Each, 42 Lbs.....\$90.00



FOLDING LAVATORIES

R-3150—ARCO

A folding lavatory with nickel plated copper lining, combined round basin and overlap slab; soap cup, nickel plated brass pump, combination swing supply faucet, nickel plated brass waste and supply couplings. Height over all, 19½ inches; width, 15 inches; depth closed, 5½ inches; open, 18½ inches; diameter

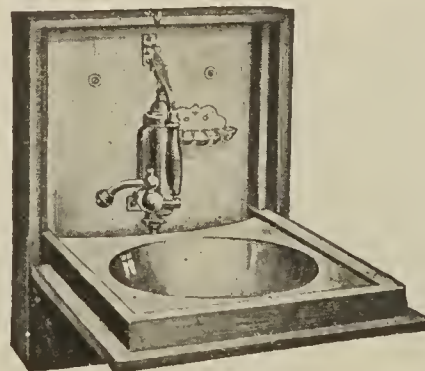


Plate R-3150

basin, 10 inches; weight each, 21 pounds.

Description

Each

Oak Varnish Finish, Weight, 19 Lbs.\$59.50

Birch Mahogany Finish 61.50

LAVATORIES



Plate R-3065

Dimensions: 14x14 inches, back 2½ inches high, basin 11 inches diameter.

Size of outlet: 1 inch outside diameter. Supply to pump ¾ inch.

R3065—With Pump, Net Weight, 24¼ Lbs. **\$31.75**
 R3055—With Faucet, Weight 22½ Lbs. **22.00**
 Less Pump or Faucet But With Fittings. **18.50**

The "Zenda" white vitreous china corner lavatory; with integral back, round basin, with overflow; secured to bulkhead with brass screws and washers and fitted with nickel plated cast brass waste plug, pedestal chain-stay, chain and stopper;

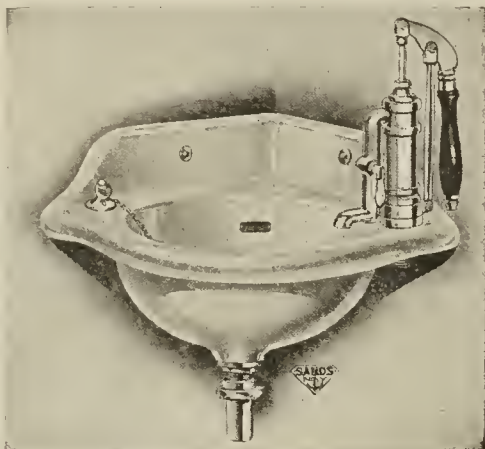


Plate R-3066

cast bronze pumps with low-down spout and integral lever handle shut-off, reversible handle with wood grip.

Dimensions: 12 inches on all sides, back 2½ inches high, basin 10 inches diameter. Size of outlet, 1 inch outside diameter. Supply to pump ¾ inch.

R3066—Net Weight, 19¼ Lbs. **\$32.50**
 Less Pump or Faucet, But With Fittings, 12 In.... **18.00**
 Less Pump or Faucet, But With Fittings, 14 In... **19.50**



Plate R-3056

down short spout compression faucet with four-ball handle.

Dimensions of lavatory: 12x12 inches, back 2½ inches high, basin 10 inches diameter.

R3056—Net Weight. 18 Lbs. **\$19.50**
 Less Pump or Faucet, But With Fittings. **16.00**

The "Zelcor" white vitreous china lavatory; with integral back, round basin with overflow; secured to bulkhead with brass screws and washers, and fitted with a nickel plated cast brass waste plug with pedestal type chain-stay, chain and stopper; cast bronze pump with low-down spout, reversible handle with wood grip.

The "Zana" white vitreous china Lavatory; with integral back, round basin with overflow; secured to bulkhead with brass screws and washers, and fitted with chromium or nickel plated cast brass waste plug with chain-stay, chain and stopper; low-

ENAMELED SINKS

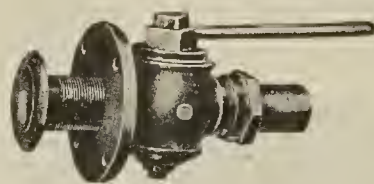
CAST IRON

Flat rim, cast iron, shallow sinks. Porcelain enameled inside and rim; nickel plated brass strainer; rubber stopper. Depth of all sizes, six inches.



| Nos. | Size, Inches | Weight Each, Lbs. | Each | Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|--------------|-------------------|---------------|------|--------------|-------------------|----------------|
| 1 | 12x12 | 17 | \$5.85 | 6 | 18x24 | 40 | \$11.30 |
| 3 | 12x18 | 25 | 6.50 | 7 | 18x30 | 54 | 11.80 |
| 4 | 14x20 | 28 | 7.80 | 8 | 20x24 | 46 | 12.30 |
| 5 | 16x24 | 36 | 8.90 | .... | .. | .... | .... |

SEA COCKS



R-4275—GRANBY

Round way (circular opening) sea cock with "Alton" thru-hull connection and intake strainer made of cast brass and furnished with lever key.

| Size, Inch | Each | Size, Inch | Each |
|------------|---------------|------------|----------------|
| ¾ | \$4.65 | 1½ | \$10.65 |
| 1 | 5.75 | 2 | 15.25 |
| 1¼ | 9.40 | ... | .... |

R-4276—With Carlton Outlet

| Size, Inch | Each | Size, Inch | Each |
|------------|---------------|------------|---------------|
| ¾ | \$4.40 | 1½ | \$9.75 |
| 1 | 5.50 | 2 | 14.25 |
| 1¼ | 8.40 | ... | .... |

Note: Always furnished with straight tail pins for lead pipe and good for planking up to two inch unless otherwise specified.

For planking above two inch in thickness, add per inch or fraction thereof up to twelve inches.

| Size, Inch | ¾ | 1 | 1¼ | 1½ | 2 |
|-------------|--------|--------|--------|--------|--------|
| Add to List | \$0.50 | \$0.60 | \$0.70 | \$0.85 | \$1.00 |

With Cast Brass, 90 Degrees Bent Tail Piece

| | | | | | |
|-------------|--------|--------|--------|--------|--------|
| Add to List | \$0.10 | \$0.15 | \$0.30 | \$0.35 | \$0.75 |
|-------------|--------|--------|--------|--------|--------|

R-4278—GRANBY

For all openings below water line; made of cast brass; composition round way sea cock. Furnished in straight and bent tail pieces with lever key. Straight tail pieces always furnished unless bent is specified.



| Size, Inches | Couplings, Each | | Size, Inches | Couplings, Each | |
|--------------|-----------------|---------------|--------------|-----------------|---------------|
| | Straight | Bent | | Straight | Bent |
| ¾ | \$3.75 | \$3.85 | 1½ | \$8.50 | \$8.90 |
| 1 | 4.40 | 4.55 | 2 | 12.50 | 13.25 |
| 1¼ | 7.25 | 7.65 | 2½ | 30.00 | 32.50 |

R-4277—FOR WINNER TOILET

Made of cast brass with straight couplings and locking plate. Used on supply and discharge of inner closet. Coupling nuts have straight tail pieces. Standard for Winner closets.



Inlet, ¾ In.; Outlet, 1¼ In.;
 Wgt. per Pr., 12 Lbs. **\$8.10**

BASIN PUMPS

R-6565—STEADY FLOW

An improved single-acting Basin or Lavatory Pump, with capacity of one quart of water to every nine strokes. May be used in regular size faucet hole. All parts above basin top beautifully chromium plated. Entire pump may also be furnished chromium plated when required. Diameter of cylinder, $1\frac{1}{2}$ inches. Length of pump from top of lavatory to end of inlet coupling $11\frac{7}{8}$ inches. Stroke, 4 inches. Inlet, $\frac{1}{2}$ inch I.P. size. Height overall, $15\frac{3}{4}$ inches.

Basin Pump \$7.75
Chromium Plated All Over..... 9.75



GALLEY PUMP

R-6560—STEADY FLOW

An improved single-acting galley pump, with a capacity of one quart of water to every nine strokes. This assures one of an ample supply of water with minimum effort through a gooseneck spout designed to permit the filling of a pitcher or thermos bottle. Sturdily constructed of bronze throughout, with parts above basin top beautifully chromium plated.

Diameter of cylinder, $1\frac{1}{2}$ inches.
Length of pump from top of lavatory to end of inlet coupling, $11\frac{7}{8}$ inches. Stroke, 4 inches. Inlet, $\frac{1}{2}$ inch I.P. size. Height overall, $17\frac{3}{8}$ inches.

Galley Pump \$9.50
Chromium Plated All Over..... 11.50



R-6500

All brass, cock-hole basin pump with low-down spout and polished hardwood handle. Diameter of cylinder, $1\frac{1}{2}$ inches. Furnished in polished brass or nickel plated brass.

| Description | Weight, Each Lbs. | Each |
|---------------------|----------------------|---------|
| Polished Brass | $3\frac{1}{2}$ | \$11.75 |
| Nickel Plated Brass | $3\frac{1}{2}$ | 13.25 |
| Chromium Plated | $3\frac{1}{2}$ | 16.50 |



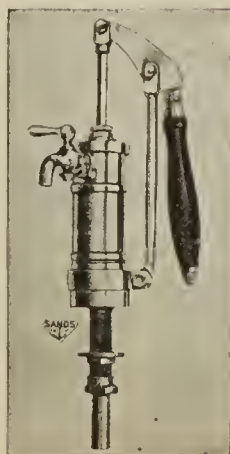
R-6515

All brass, $1\frac{1}{2}$ inch cylinder cock-hole or dresser galley pump; with stop cock and hardwood handle, polished.

| Description | Weight Each, Lbs. | Each |
|---------------------|----------------------|---------|
| Polished Brass | $3\frac{1}{2}$ | \$11.75 |
| Nickel Plated Brass | $3\frac{1}{2}$ | 13.25 |
| Chromium Plated | $3\frac{1}{2}$ | 16.50 |

R6520—For Bulkhead

| | | |
|---------------------|---|---------|
| Polished Brass | 4 | \$13.50 |
| Nickel Plated Brass | 4 | 14.50 |
| Chromium Plated | 4 | 17.00 |



FAUCETS

R-6038—COMPRESSION

Made of cast brass in polished and nickel plated finish. Compression faucet with shoulder and tee handle. Can also be furnished with ball wheel handle and china index when so ordered. Measurements are inside pipe.

| Size, Inch | Weight Each, Lbs. | Polished Brass | Nickel Plated |
|---------------|----------------------|----------------|---------------|
| $\frac{1}{2}$ | $\frac{7}{8}$ | \$1.65 | \$1.95 |
| $\frac{3}{4}$ | $1\frac{1}{8}$ | 2.75 | 3.10 |



R-6037—SINK FAUCET

A self-closing sink faucet with a four ball wheel handle with china index. Made of cast brass with hexagon shoulder, polished and nickel plated finishes. Measurements are inside pipe.



| Size, Inch | Weight Each, Lbs. | Nickel Plated | Chromium Plated |
|---------------|----------------------|---------------|-----------------|
| $\frac{1}{2}$ | $\frac{7}{8}$ | \$4.00 | \$4.75 |
| $\frac{3}{4}$ | $1\frac{1}{8}$ | 4.75 | 5.50 |

R-3202—SELF-CLOSING

Made of cast brass, nickel plated finish, highly polished. A four-ball self-closing handle, ball bearing china index faucet. Measurements are inside pipe.

No. 620—Size, $\frac{1}{2}$ Inch; Weight.
Each, 2 Lbs. \$5.00

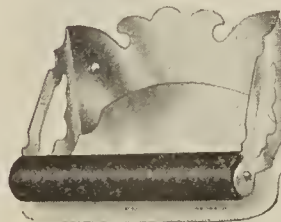


TOILET PAPER HOLDERS

Made of heavy brass, chromium plated, with a high finish.

Roller of hard wood, ebony finish.

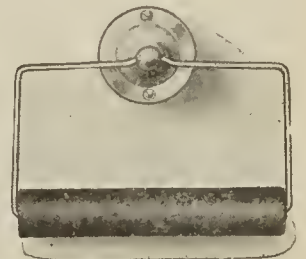
No. 1566C \$1.50



1566-C

Brass chromium plated.
Roller of hard wood, ebony finish.

No. 1580C \$0.50



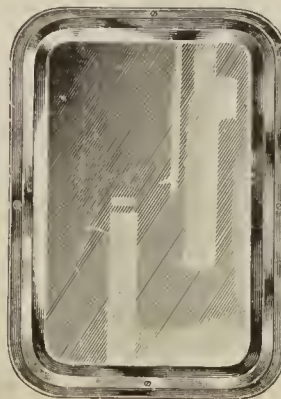
1580-C

MIRRORS

Plate glass mirror, with rounded corners in a wood frame of pleasing rounded surface.

Finished in lustrous white enamel. Frame $1\frac{1}{2}$ inches wide. Bevelled plate glass mirror.

| Nos. | Size, Inches | Each |
|------|--------------|--------|
| 22 | 12 x 30 | \$4.90 |
| 23 | 14 x 24 | 6.00 |
| 24 | 16 x 20 | 6.75 |



FIRE EXTINGUISHERS

Pyrene



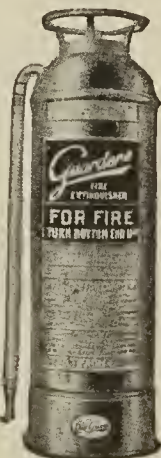
Tested and approved by Underwriters' Laboratories, Inc.

Efficient and safe for use against fires of oil, gasoline, or when live wires are present. The liquid is pumped from the extinguisher from a safe distance and the heat turns it into a heavy vapor which settles over the flame and smothers it. Will not stain or mar varnish or upholstery. Operates easily and refills quickly. Shell made of brass, polished or nickel plated; interior mechanism consists of 43 separate parts made of brass and white metal.

- Each
- Extinguisher Complete with Bracket; Capacity 1 Quart; Diameter, 3 Inches; Length Overall, 14 Inches; Weight Each, 7 Lbs.\$11.20
- *Extinguisher Complete with Bracket; Capacity 1 Pint; Diameter, 2 5/8 Inches; Length Overall, 11 Inches; Weight Each, 4 3/4 Lbs. 8.00
- Pyrene Liquid—1 Pint Can90
- Pyrene Liquid—1 Quart Can..... 1.80
- Pyrene Liquid—1 Gallon Can..... 6.50
- Extra Enameled Bracket
- *Note—Does not pass Inspection.

Guardene

Approved by the National Board of Fire Underwriters. Shell constructed of heavy special cold rolled copper, heavily lined with lead; double lock joint seam, reinforced on inside by a bronze stay; all sweated together and soldered, making a smooth, strong joint. Bottom cannot be forced out at any pressure; works automatically, by turning bottom up the sulphuric acid is fed automatically into a supply of soda solution generating correct amount of gas at all times without danger of explosion; throws stream 50 feet. Diameter, 7 inches; height overall, 23 3/4 inches; capacity, 2 1/2 gallons.



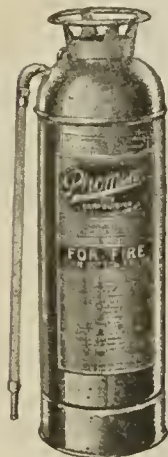
- Each
- Guardene—Weight Charged, 40 Lbs.\$10.50
- Extra Recharges50

PHOMENE—FOAM TYPE

Approved by the Underwriters' Laboratories and endorsed by insurance authorities generally as a substitute for the soda and acid extinguishers, and is endorsed for many hazards where the soda and acid extinguisher would not be acceptable. Ejects 20 gallons of tough fire-proof foam which spreads over the burning surface and cuts off the supply of oxygen, the fire once extinguished cannot re-ignite as the foam blanket remains there. Will extinguish burning oils, enamels, tar, wax, grease, shellac, lacquers, inflammable solvents or chemicals. A very effective extinguisher for public garages, manufacturing plants, etc.

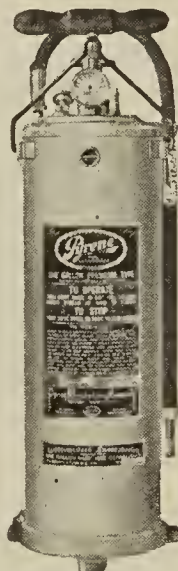
Shell constructed of heavy cold rolled copper polished and lacquered, heavily lined with lead; double lock joint seams reinforced inside by a bronze stay, all sweated together and soldered, making a smooth strong joint. Length of stream, 25 to 35 feet. Tank must be recharged yearly and protected from frost.

- Phomene—Actual Capacity, 3 Gallons; Rated Capacity (Volume of Liquid), 2 1/2 Gallons; Diameter, 7 Inches; Height Overall, 24 Inches; Weight Filled, 42 Lbs.; Weight Empty, 18 Lbs.; Amount of Foam Produced, 20 Gallons\$13.25
- Extra Recharge 1.50

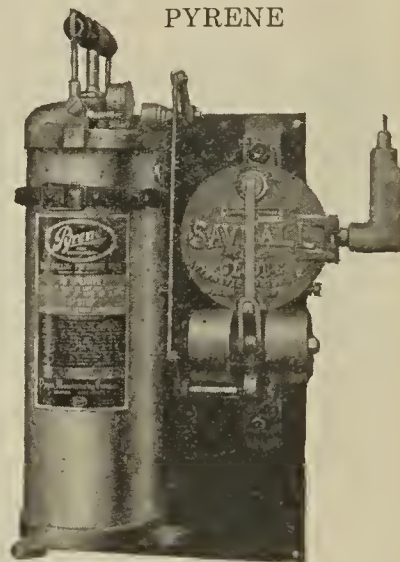


FIRE EXTINGUISHING SYSTEMS

PYRENE



Manual Type



Automatic Type

A pressure type fire extinguisher which can be installed for automatic or manual operation. It is so simple in design and operation that it will smother fire in engine, bilge and galley instantly. To install, attach a line or flexible copper tubing, terminating in spray heads over the hazard. When the operating wheel on the extinguisher is turned, air pressure stored in the extinguisher forces Pyrene liquid through the spray heads, quickly blanketing the fire. For remote control, connections may be installed in any part of the boat to operate the system. Can be recharged afloat by simply pouring one gallon refill into the extinguisher and pumping to 100 pounds air pressure with the built-in air pump.

| Nos. | Type | Maximum Air Space Protected | Per Outfit |
|--------|-----------|-----------------------------|------------|
| C-62S | Manual | 75 Cubic Feet | \$40.00 |
| C-62SA | Automatic | 75 Cubic Feet | 112.00 |
| C-42S | Manual | 300 Cubic Feet | 69.00 |
| C-42SA | Automatic | 300 Cubic Feet | 138.00 |
| C-92S | Manual | 600 Cubic Feet | 99.00 |
| C-92SA | Automatic | 600 Cubic Feet | 171.00 |

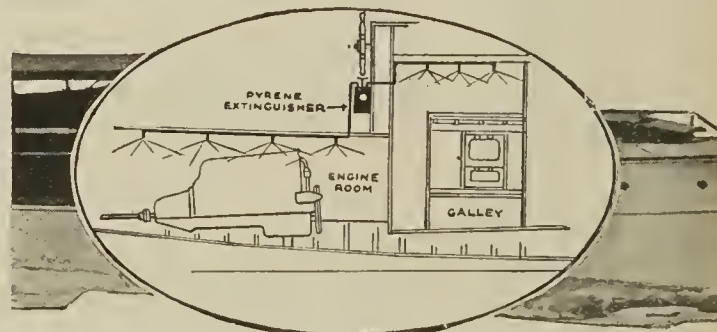


Diagram Showing How System Protects Engine, Bilge and Galley



Firemaster

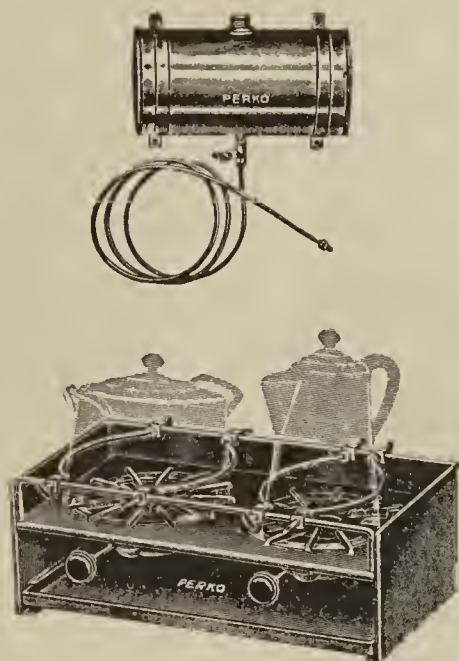
AUXILIARY FIRE EXTINGUISHER

This is a simple, dependable, pump action extinguisher which is very easy to handle. Is positively sealed and is good until used. Contains carbon tetrachloride which is the most efficient fluid known for putting out fires. To operate, turn the handle, breaking the seal and pull. When empty throw away as this cannot be refilled.

- Each
- Complete With Bracket\$2.50

Is Not Approved by Underwriters' Laboratories

ALCOHOL STOVES



| | Extreme Length Inches | Extreme Height Inches | Extreme Width Inches | Weight Complete With Tank Pounds |
|---|-----------------------|-----------------------|----------------------|----------------------------------|
| 2 Burner | 20 | 7 | 14 | 24 |
| 3 Burner | 31 | 7 | 14 | 36 |
| 2 Burner complete, except Pot Holders..... | | | | \$18.00 |
| 3 Burner complete, except Pot Holders..... | | | | 27.00 |
| Cast Bronze Pot Holders—per pair—for one Burner | | | | 1.50 |

TWO AND THREE BURNERS—IMPROVED FURNISHED COMPLETE WITH 1 GALLON COPPER TANK, 5 FEET COPPER TUBING AND ALL FITTINGS FOR IMMEDIATE INSTALLATION AND USE.

ALSO FURNISHED, IF DESIRED, WITH CAST BRONZE POT HOLDERS AS ILLUSTRATED (PAT. PENDING), ADJUSTABLE FOR ANY SIZE POT.

Constructed of heavy gauge sheet steel, double seamed and riveted at all joints, heavy wire bead around the edges.

This stove uses high grade denatured alcohol which is a safe, dependable fuel and can be obtained anywhere at small cost.

The improved burners give a clear blue flame not disturbed by vibration or rough seas, and will burn for about 10 hours on one gallon of alcohol. A sliding tray is furnished which is firmly held in place, yet easily removed.

Standard finish is a neutral gray which will harmonize with the finish of most galleys. Other colors can be obtained if desired.

YACHT PORT VENTILATORS

LEE—ELECTRIC

Small size, large capacity fan for removing heat and odors from galleys, cabins, toilets and engine rooms. Entirely made of bronze, outer cover and motor parts polished; inner flange grey enameled. Closes against a rubber gasket; entirely waterproof. Capacity, 100 cubic feet of air per minute. For 32 or 110 volts. Current consumption small.

Each

No. 410—Diameter Outside Flange, 7½ Inches; Inside Flange, 6½ Inches; Depth Inside Flange to Motor End, 3½ Inches; Weight Each, 8 Lbs.....\$37.50
Note—Can be furnished without cover for \$26.50.

MARINE ELECTRIC POWER BLOWERS

FOR GALLEY, ENGINE ROOM, BILGE

Will effectively remove food odors from the galley; dangerous gasoline fumes from engine room or bilge, reducing fire hazards due to explosion. Is made of a non-corrosive metal. Motor is fully enclosed, spark proof. Impeller is completely housed and provision is made for lubricating the motor. Blower intake has a

flange to take 3 inch lead or elbow. Delivers 120 cu. ft. per minute.

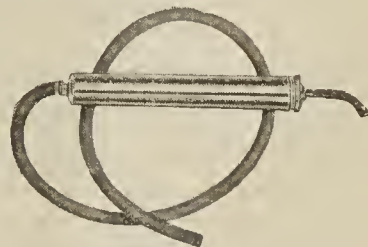
Furnished in 6, 12 or 32 volts.

| Height, Inches | Width, Inches | Length, Inches | Diam. of Intake | Each |
|----------------|---------------|----------------|-----------------|---------|
| 6 | 6¾ | 6½ | 3 | \$12.00 |

Be Sure to Specify Voltage.

GASOLINE SIPHONS

Offers a convenient means for filling fuel tanks of gasoline or kerosene stoves; a slight pull on plunger starts flow; complete with 2 feet of hose and bent spout; made of seamless brass tubing.



Siphon—Size of Cylinder, 6x¾ Ins.; Weight Each, 3½ Ounces\$1.00

KEROSENE STOVES

VAN PRAAG

JEWEL—SINGLE BURNER

Generates its own gas by forcing vapor through the burner which has been preheated. It does not make smoke or soot and is not noisy; burns kerosene only.

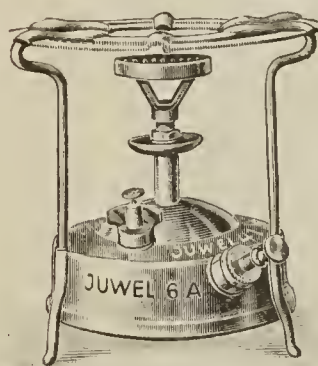
Container is of solid brass with a pump built in; steel uprights; stamped steel top ring; cartridge burner.

Consumes about 1½ pints of fuel in three hours and will boil a quart of water

Each

in three minutes.

No. 6A—Capacity, 1 Quart; Diameter of Top, 8¼ Inches; Height, 8½ Inches; Weight Each, 2½ Lbs.. \$6.00



DOUBLE BURNER—WITH TOP RAIL

Generates its own gas by forcing kerosene vapor through the burner which has been preheated. It does not smoke or make soot and is not noisy; burns kerosene only. Frame is of stamped steel, oxidized; heavy brass container; polished steel rail around the top.

No. 52—Capacity, 2 Quarts; Size of Top, 18¾x9½ Inches; Size of Top with Rail, 20½x11 Inches; Height of Stove, 7¾ Inches; Weight Each, 11½ Lbs.\$18.00

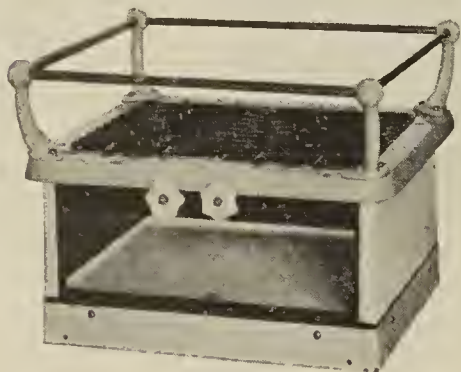
UNIVERSAL BOTTLED GAS

for COOKING — BAKING — BROILING — WATER HEATING
LIGHTS and BURNS LIKE CITY GAS

Safe — Economical — Convenient — Clean

Turn a valve, touch a match—instant heat with a clean blue flame

TWO-BURNER STOVE



No. 20M

An ideal stove for the small motor boat. Gray and white vitreous enamel finish, with brass fittings and rail.

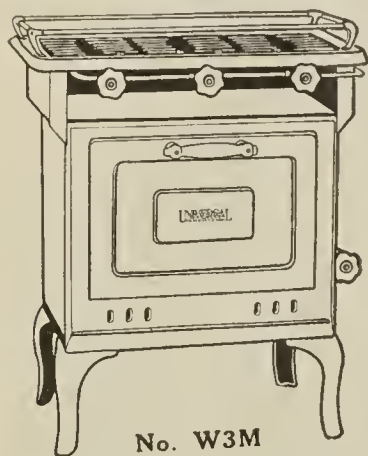
Length, 20 Inches—Depth, 15 Inches—Height, 14 Inches.

Complete with 2 Small Cylinders of Gas and System **\$85.00** Each

No. 30M—Same finish as No. 20M but with three burners.

Length, 28 Inches—Depth, 15 Inches—Height, 14 Inches.

Complete with 2 Small Cylinders of Gas and System **\$100.00** Each



No. W3M

JUNIOR RANGES

3 BURNER TOP

No. W3M — A compact stove, suitable for a narrow galley—Note the depth—

Three burner cooking top with baking and broiling burners in oven below.

Length 28 Inches
Depth 15 Inches
Height 30 Inches

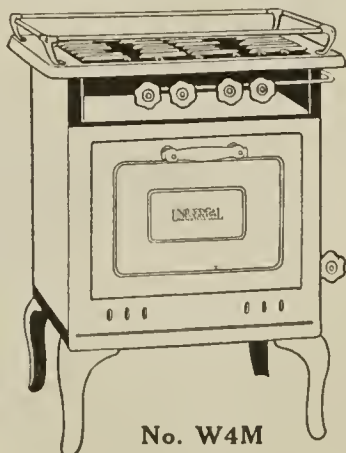
Each

Complete with 2 Small Cylinders of Gas and System **\$165.00**

4 BURNER TOP

No. W4M—Has a baking and broiling oven with 4 burners on top. Finished in grey and white or green and cream vitreous enamel.

Length 27 Inches
Depth 22 Inches
Height 30 Inches



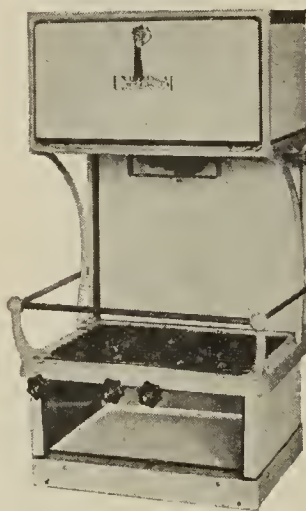
No. W4M

Complete with 2 Small Cylinders of Gas and System **\$185.00** Each

Complete with 2 Large Cylinders of Gas and System **200.00**

Insulated ovens for either size Junior Range, Extra **6.75**

ELEVATED OVEN STOVE



No. 25M

No. 25M—A very convenient two-burner stove with a baking oven located directly above.

Finished in grey and white vitreous enamel with brass fittings and marine rail.

Length 22 Inches

Depth 15 Inches

Height 34 Inches

Each

Complete with 2 Small Cylinders of Gas and System **\$140.00**

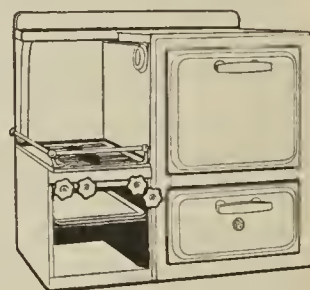
CABINET RANGES

For use on top of lockers

No. 214M—A very convenient stove for the galley of limited floor space. Two burner cooking top with baking and broiling ovens located at the side, either to the right or left as desired.

Finished in grey and white vitreous enamel with marine fittings and rail.

Length 28 Inches
Depth 24 Inches
Height 28 Inches

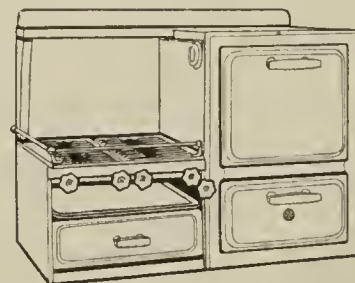


No. 214M

Complete with 2 Small Cylinders of Gas and System **\$160.00** Each

Complete with 2 Large Cylinders of Gas and System **175.00**

Specify Right or Left Hand Ovens



No. 536M

No. 536M—Four-burner cooking top stove with baking and broiling ovens at the side, either right or left of the cooking top, as desired. Finished in grey and white vitreous enamel with marine fittings and rail.

Length, 40 Inches—Depth, 24 Inches—Height, 28 Inches.

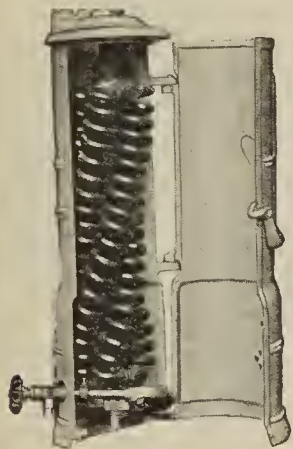
Each

Complete with 2 Small Cylinders and System **\$180.00**

Complete with 2 Large Cylinders and System **195.00**

Specify Right or Left Hand Ovens

UNIVERSAL BOTTLED GAS WATER HEATER



No. 6

All the Hot Water you want whenever you want it. Hot water for bathing — shaving — washing dishes—laundry work!

Universal Bottled Gas will enable you to heat water *quickly* and at **VERY LOW COST**.

The unusual efficiency of this water heater is due to the construction of the heating coils. Four coils, totaling thirty-two feet in length, are so arranged as to utilize all of the rising heated gases, resulting in unusual economy.

Height, 24 inches.

Diameter, 9 inches.

Connections, $\frac{3}{4}$ In. I.P.

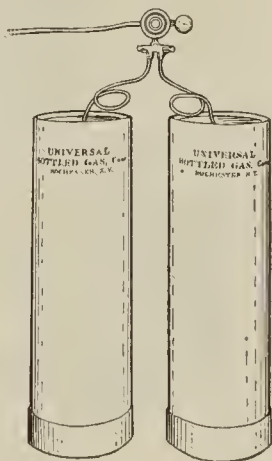
Each

Complete**\$32.50**

BLUE SPOT GAS

UNIVERSAL BOTTLED GAS is a liquified gas manufactured from a special formula and bottled under moderate pressure in **approved** steel containers and should not be confused with ordinary casing head gasoline. The containers comply with the specifications of the Interstate Commerce Commission and can be shipped anywhere by Express, Freight or Steamer. The large cylinders of gas have enough fuel to burn 600 hours on one burner, and measure 12 inches in diameter, 37 inches high.

The smaller cylinder contains fuel for 200 hours on one burner and measures 12 inches diameter, 17 inches high.



Weight

Each

Large Cylinder without Gas125 **\$24.00**

Small Cylinder without Gas 65 **18.50**

Large Cylinder Refill of Gas **12.00**

Small Cylinder Refill of Gas **8.00**

REFILLS

Empty cylinders should be returned by freight or express **prepaid** to us at Kane, Pa., c/o Universal Bottled Gas Corporation; mail Bill of Lading to us at New York, with order for renewals. When empty, tanks shipped to us via freight **prepaid** to Kane, Pa., as above, credit will be given upon receipt of Bill of Lading covering shipment. Tag all returns with your name to insure identification.

UNIVERSAL BOTTLED GAS SYSTEM

Consists of two sturdy steel cylinders containing gas, connected by a manifold that controls the flow of gas to the stove, plus pressure regulating equipment and piping. Cylinders are easily and quickly connected and disconnected. The fuel contents of the large cylinder when used with our burner equipment will do about the same amount of cooking as 5,000 feet of the average city gas.

Quick—Sure—Safe

ELECTRIC REFRIGERATORS KELVINATOR

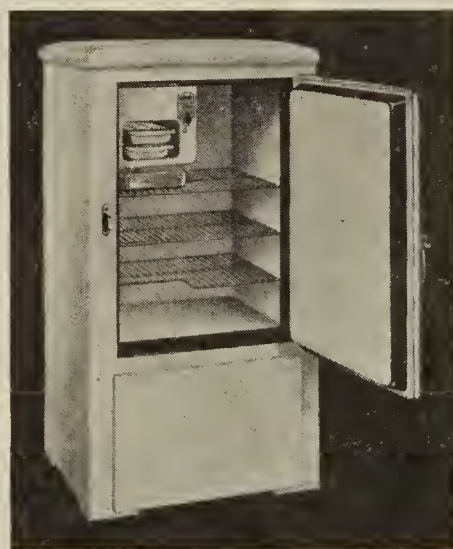


Marine Model 3

No more bother with ice—*cast off* without the trouble and delay of "icing up." Stay out as long as you like; your food will always keep fresh. These refrigerators will make enough ice in twelve hours for 100 drinks—200 ice cubes at the rate of 42 every $2\frac{1}{2}$ hours. And you can make ice cream aboard—all of the delicious things you have at home. And you will be surprised at their moderate cost and ease of installation.

Designed for operation from regular 32-volt lighting systems on yachts from 35 to 65 feet. Food storage capacity 3.13 cu. feet— $6\frac{1}{2}$ sq. ft. shelf area. Two 21-cube ice trays, one metal and one rubber grid. Motor $\frac{1}{6}$ h.p. 32 or 110-volt, operating wattage only 180 watts per hour. Motor mounted on rubber to insure silence.

Height, $37\frac{3}{4}$ Inches; Width, $25\frac{7}{8}$ Inches; Depth, $20\frac{1}{2}$ Inches; 32v. or 110v. List Price.....**\$250.00**



Marine Model 5

All steel construction, special lacquer enamel exterior finish, one-piece porcelain interior, rounded corners, flat table top, legs, chip proof door interior trim, wide bar shelves, Flexo tray, accessible temperature selector, and defrosting switch, Butler chrome finish hardware, glass defrosting tray.

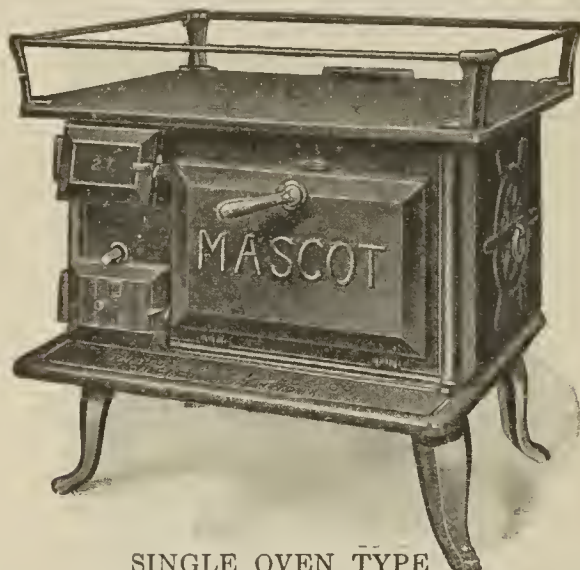
Exterior: White lacquer enamel on rust-proof steel. Interior: All rounded corners, porcelain on Armco iron. Shelf Area: 3 shelves, bottom and defrosting tray, total 9.16 square feet. Total Capacity: Approximately 5.15 cubic feet. Food Storage Capacity: Approximately 5 cubic feet. Two 21-cube trays (one Flexo tray). 4 pounds of ice per freezing. Overall Dimensions: Height, 50 inches; width, $26\frac{5}{8}$ inches; depth, $23\frac{3}{4}$ inches.

Designed to operate from regular 32-volt lighting system, or from 110-volt system. Specify when ordering.

Each

Complete Ready to Install**\$260.00**

SHIP RANGES



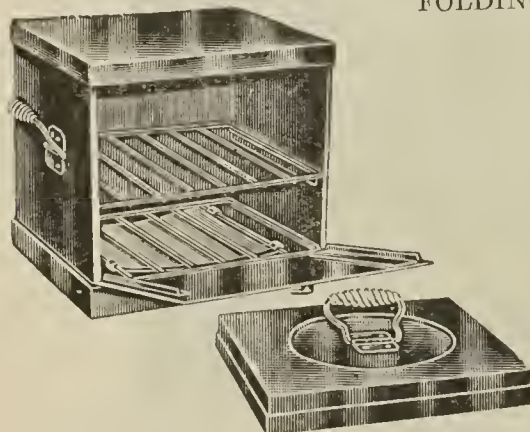
SINGLE OVEN TYPE

Made in sizes suitable for small motor boats up to the larger sizes of seagoing vessels; used for any sort of cooking, roasting or baking; burns either coal or wood; rings on the ends for securing to the floor or deck with turnbuckles; has a deep ash pit; large flues; adjustable openings for various size cooking utensils; the oven and drop door have cast iron lining; the drop door, when let down, serves as a shelf for holding pots and pans; the oven door hinge pins are of brass so that they will work easily; the oven door is provided with a heavy clamp handle which holds the door firmly.

| Nos. | Size of Oven, Inches | Size of Top, Inches | Height Overall, Inches | Size of Cover Holes, Inches | Capacity Waterback per Hour, Gallons | Weight Each, Lbs. | Each |
|---------------------------|--|---------------------|------------------------|-----------------------------|--------------------------------------|-------------------|---------|
| 7 | 9 x 9 x 7 | 20x13 $\frac{1}{4}$ | 18 $\frac{1}{2}$ | 6 and 7 | .. | 100 | \$20.80 |
| 10 | 12 x 11 $\frac{1}{2}$ x 8 $\frac{1}{2}$ | 24x16 $\frac{1}{2}$ | 20 $\frac{1}{2}$ | 8 | .. | 160 | 36.80 |
| 17 | 14 x 11 $\frac{1}{2}$ x 8 $\frac{1}{2}$ | 23x24 | 20 $\frac{1}{2}$ | 7 | .. | 220 | 45.60 |
| 18 | 16 x 11 $\frac{1}{2}$ x 8 $\frac{1}{2}$ | 24x25 | 20 $\frac{1}{2}$ | 8 | 25 | 245 | 49.60 |
| 27 | 16 $\frac{1}{2}$ x 16 $\frac{1}{2}$ x 10 | 26x33 | 26 | 7 | 40 | 340 | 68.00 |
| 28 | 19 $\frac{1}{2}$ x 18 x 11 | 28x36 | 26 | 8 | 40 | 420 | 81.60 |
| Turnbuckles Per Set | | | | | | | 2.40 |

Above Prices Include Marine Rails

FOLDING OVEN



Hot plate, for use on any flat top galley stove.

When not in use it folds up, has close-fitting joints; retains the heat and bakes and roasts perfectly; made of non-rusting steel plate; size when open, 12 x 11 x 11

inches; size when closed, 12x11x2 inches.

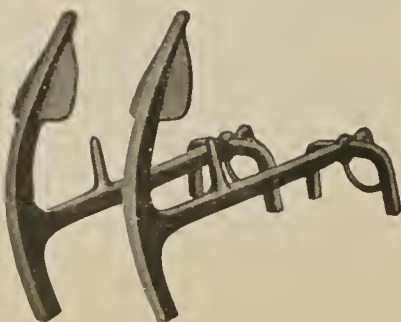
Stove Oven—Weight Each, 6 $\frac{1}{4}$ Lbs. Each \$2.75

ANDIRONS

Modeled after the old fashioned kedge anchor with log guards and legs added. Most suitable for yachtsmens' homes and for clubhouse use. Dull black japanned finish. Length over all, 24 inches; height, 17 inches.

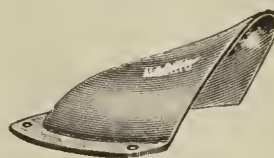
Per Pair

No. 899—Wgt.
per Pair, 44
Lbs. \$10.00



VENTILATORS

CLAM SHELL



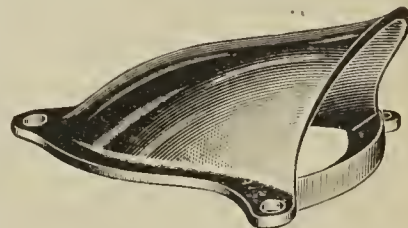
Used on speed boats in place of cowl ventilator; can also be used as an exhaust deflector. Made of cast bronze highly polished.

| Nos. | Width Opening, Inches | Height Opening, Inches | Size Base, Inches | Weight Ounces |
|------|-----------------------|------------------------|-----------------------------------|---------------|
| 4 | 2 $\frac{3}{4}$ | 1 $\frac{3}{4}$ | 3 $\frac{5}{8}$ x 3 $\frac{1}{2}$ | 11 |
| 5 | 3 $\frac{1}{2}$ | 2 | 4 x 3 $\frac{7}{8}$ | 14 |

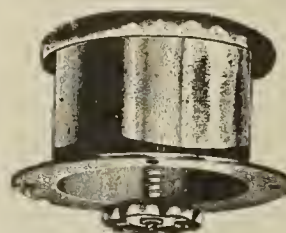
| Nos. | Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
|------|-----------------|---------------|---------------|-----------------|
| 4 | \$1.40 | \$1.70 | \$1.70 | \$2.50 |
| 5 | 1.50 | 1.80 | 1.80 | 2.70 |

STREAM-LINED

An improved form of clam shell ventilator for runabout and speed boat use. Has $\frac{1}{2}$ -inch high water lip and can be used as exhausting ventilator by reversing. Width of opening, 3 $\frac{1}{2}$ inches; extreme height, 2 $\frac{3}{8}$ inches; dimensions of base, 6 $\frac{1}{2}$ x4 $\frac{7}{8}$ inches; length overall, 6 $\frac{7}{8}$ inches. Cast brass, highly polished.



No. 1608—Weight Each, 1 $\frac{1}{4}$ Lbs. \$3.00

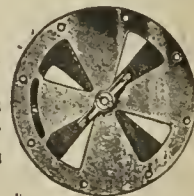
MUSHROOM VENTILATOR
GALVANIZED IRON

For deck and cabin ventilation. Round top fits snugly over the water guard when closed.

| Size, Inches | Closed | Height, Inches | Open | Each |
|--------------|------------------|----------------|------------------|---------|
| 6 | 5 $\frac{1}{2}$ | | 9 $\frac{1}{2}$ | \$17.00 |
| 7 | 6 $\frac{3}{4}$ | | 11 | 20.00 |
| 8 | 7 $\frac{1}{4}$ | | 12 $\frac{3}{4}$ | 23.00 |
| 9 | 7 $\frac{1}{2}$ | | 13 $\frac{1}{2}$ | 26.00 |
| 10 | 7 $\frac{3}{4}$ | | 14 $\frac{3}{4}$ | 29.00 |
| 12 | 10 $\frac{1}{4}$ | | 17 $\frac{1}{2}$ | 32.00 |

SHUTTER TYPE

Made of cast brass, polished natural brass finish; for use on any type of cabin boat. Is easily operated and eliminates the necessary unscrewing in the other types of ventilators; $\frac{1}{8}$ turn and it is opened.

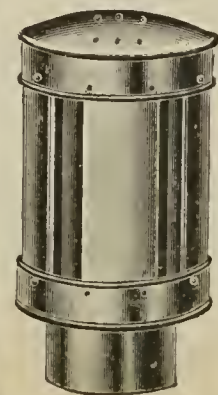


| Outside Diam., Inches | Each |
|-----------------------|--------|
| 6 $\frac{1}{2}$ | \$6.00 |
| 10 | 10.00 |

LIVERPOOL HEADS

Made in brass or copper, polished natural finish or in iron, hot galvanized finish.

| Diam. of Pipe, Ins. | Brass | Galvanized |
|---------------------|--------|------------|
| 3 | \$7.00 | \$5.50 |
| 3 $\frac{1}{2}$ | 7.25 | 5.75 |
| 4 | 7.50 | 6.00 |
| 4 $\frac{1}{2}$ | 8.60 | 6.60 |
| 5 | 9.30 | 7.20 |
| 5 $\frac{1}{2}$ | 10.20 | 8.60 |
| 6 | 12.00 | 8.90 |
| 7 | 15.00 | 10.00 |
| 8 | 18.00 | 15.00 |
| 10 | 25.00 | 18.00 |



VENTILATORS

HOOD

Seamed construction; wrought brass or hot galvanized sheet iron. With polished cast brass deck plate and key; can also be furnished with swivel deck plate enabling hood to be turned in any desired direction.



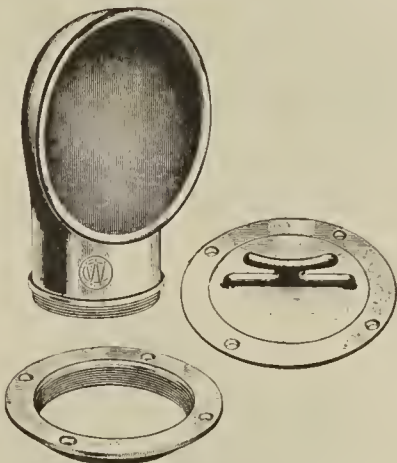
| Diameter at Deck, Inches | Height, Inches | Diameter at Mouth, Inches | Galvanized | Each Brass | Brass |
|--------------------------|----------------|---------------------------|------------|------------|--------|
| 2 1/2 | 7 | 5 | \$5.60 | \$7.25 | .... |
| 3 | 8 | 6 | 5.80 | 7.50 | \$8.65 |
| 3 1/2 | 10 | 7 | 6.50 | 8.50 | .... |
| 4 | 11 | 8 | 7.70 | 9.00 | 11.25 |
| 4 1/2 | 12 | 9 | 10.00 | 12.00 | .... |
| 5 | 13 | 10 | 12.00 | 14.00 | 15.25 |
| 6 | 15 | 12 | 16.50 | 19.00 | 20.75 |
| 8 | 20 | 16 | 25.00 | 28.50 | 27.50 |

With Swivel Deck Plate

COWL

OVAL MOUTH

Used by one of the most famous cruiser builders. Large opening makes for greater air circulating efficiency. Adds immeasurably to the appearance of any boat. Made of cast brass, highly polished outside and painted inside. Furnished with deck plate, cover and key.



| Size, Inches | Height Overall, Inches | Dimensions of Mouth, Inches | Weight Each, Lbs. | Each |
|--------------|------------------------|-----------------------------|-------------------|---------|
| 2 1/2 | 7 | 3 3/4 x 5 3/4 | 3 1/2 | \$10.00 |
| 3 | 8 1/2 | 4 1/8 x 6 1/4 | 4 3/4 | 12.00 |
| 4 | 9 | 4 3/4 x 6 5/8 | 8 1/2 | 15.00 |
| 5 | 11 3/8 | 6 7/8 x 8 3/8 | 14 5/8 | 20.00 |

ADJUSTABLE—CAST BRASS



Navy design cowl ventilator for runabouts and day cruisers. Furnished with swivel deck plate with extra cover and key as illustrated. Cast brass polished or nickel plated finishes. Round mouth; inside painted bright red.

| Diameter at Deck, Inches | Height, Inches | Diameter of Mouth, Ins. | Weight Each, Lbs. | Each No. P 737, Brass |
|--------------------------|----------------|-------------------------|-------------------|-----------------------|
| 3 | 7 1/4 | 6 | 4 3/4 | \$12.00 |
| 4 | 9 1/4 | 8 | 8 1/2 | 15.00 |
| 5 | 11 1/4 | 10 | 17 | 20.00 |
| 6 | 13 1/4 | 12 | 31 | 45.00 |

Note—Can be chromium plated on order.

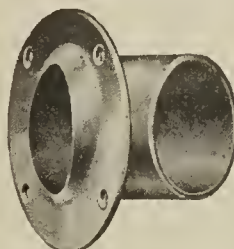
HAMMERED COPPER

Beautifully finished, hand hammered ventilators. Furnished with deck plates. Highly polished. For finest type boats.

| Diameter at Deck, Ins. | Diameter at Mouth | Weight Each, Lbs. | Each With Screw Deck Plate | Each With Swivel Ring |
|------------------------|-------------------|-------------------|----------------------------|-----------------------|
| 3 | 6 | 5 | \$17.50 | \$20.50 |
| 4 | 8 | 9 1/2 | 23.50 | 27.50 |
| 5 | 10 | 18 | 39.00 | 43.00 |
| 6 | 12 | 40 | 44.00 | 48.00 |
| 8 | 16 | .. | 68.00 | 70.00 |

COMPARTMENT VENTILATORS

OUTLET TYPE



For use on hulls of runabouts or cruisers. Made of cast bronze or nickel silver, highly polished, interior painted in green enamel.

Diameter Opening 2 1/8 in.
Diameter Flange 4 in.
Weight 19 oz.

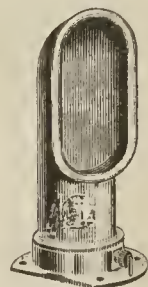
| | | | |
|-----------------|---------------|---------------|-----------------|
| Polished Bronze | Nickel Plated | Nickel Silver | Chromium Plated |
| \$1.75 | \$2.00 | \$2.00 | \$3.50 |

EXHAUST FAN VENTILATOR

POLISHED BRASS

A ventilator of entirely new design. Intended for use in connection with exhaust fans, but equally good for intake ventilation.

Especially designed to fit on the narrow deck space alongside the cabin.



Painted an Attractive Red Inside; Green only to order

| | | |
|----------------------|----------------------|------------------------------|
| Polished Brass, Each | Chromium Plated Each | Polished Nickel Silver, Each |
| \$8.00 | \$14.50 | \$9.00 |

COWL VENTILATORS

POLISHED CAST BRASS

Complete With Polished Brass Deck Plates Round Mouth

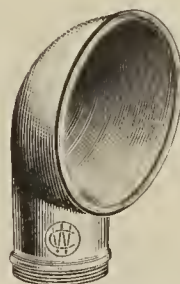
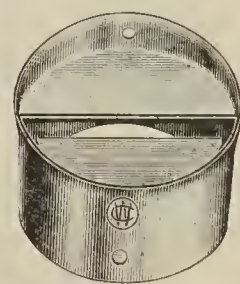
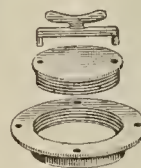
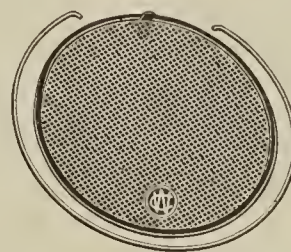


Fig. 8781A



Baffle Plates for Fig. 8781A



Screen for Fig. 8781A

An entirely new feature in Cowl Ventilators is the invisibly fitted Baffle Plate. Will catch ordinary rain or spray and prevent water from dripping down inside the cabin.

Another desirable feature is the Copper Screen which can be inserted in the mouth of the ventilator to keep out insects. The screen is held in place by snap rings.

Painted an Attractive Red Inside; Green only to order

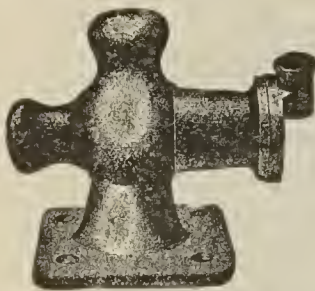
Round Mouth Type—with Baffle Plates and Screen.

Dia. of Deck Plate 3 in.; Diam. of Mouth 6 in.; Height 8 in.; Weight 4 3/4 lbs.

| For Diam. of Deck Plate, Inches | Diam. of Mouth, Inches | Height, Inches | Weight, Lbs. | Polished Brass, Each | Chromium Plated, Each | Polished Nickel Silver, Each |
|---------------------------------|------------------------|----------------|--------------|----------------------|-----------------------|------------------------------|
| 3 | 6 | 8 | 4 3/4 | \$17.00 | \$25.00 | \$20.00 |

HAND POWER WINDLASSES

ENOS
WITH SINGLE BARREL

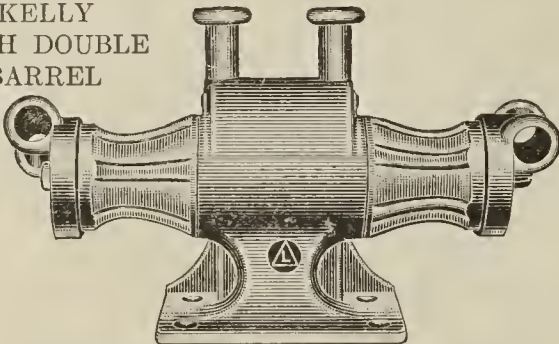


This style windlass combines features most desirable for launch, yacht, pilot and motor boat use; it is particularly neat in appearance, having no sharp corners or exposed ratchets to cut or chafe the rope.

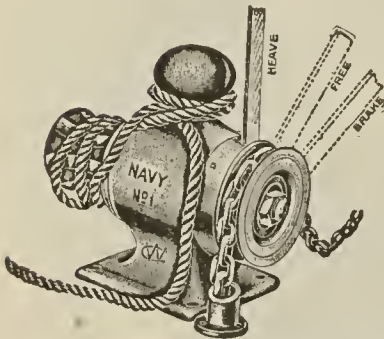
Made of cast iron, hot galvanized or brass polished; base provided with four bolt holes for mounting to deck.

| Size Nos. | Height Overall, Inches | Length Overall, Inches | Diameter Drum, Inches | Size Base, Inches | Size Bolt Holes, Inches | Weight Each, Lbs. | Each | |
|-----------|------------------------|------------------------|-----------------------|-------------------|-------------------------|-------------------|------------|----------------|
| | | | | | | | Galvanized | Polished Brass |
| 0 | 6 | 7½ | 2½ | 4½x 6 | ⅝ | 11½ | \$12.50 | \$30.00 |
| 1 | 8½ | 9 | 3¼ | 6⅜x 8½ | ⅝ | 22½ | 22.50 | 55.00 |
| 2 | 10½ | 11 | 3½ | 7¼x 9½ | ⅝ | 31¼ | 25.00 | 65.00 |
| 3 | 11½ | 13½ | 4½ | 9 x12 | ¾ | 50½ | 35.00 | 85.00 |

KELLY
WITH DOUBLE
BARREL



| Size Nos. | Height Overall, Inches | Length Overall, Inches | Diameter Drum, Inches | Size Base, Inches | Weight Each, Lbs. | Each | |
|-----------|------------------------|------------------------|-----------------------|-------------------|-------------------|------------|----------------|
| | | | | | | Galvanized | Polished Brass |
| 1 | 9 | 15 | 3¼ | 8½x 8⅝ | 43 | \$35.00 | \$95.00 |
| 2 | 10 | 17 | 3½ | 8⅝x9 | 55½ | 38.50 | 110.00 |
| 3 | 12½ | 20 | 4½ | 10½x11 | 87½ | 45.00 | 170.00 |



NAVY
GALVANIZED

This windlass embodies features not found in the ordinary type of windlass. In addition to the usual heaving operation, shaft may be released and allowed to run free, or stopped and held fast at any point. Three operations are controlled

by a single lever without changing position of operator's hand. Brake is positive and will not slip. Controlling the chain prevents piling up. Made of cast iron with hot galvanized finish. Fitted with wildcats for BBB chain. A special chain deck pipe is furnished with each windlass. No. 0 windlass is recommended for anchors up to 100 pounds; No. 1 windlass for anchors up to 175 pounds. A 33 inch galvanized iron heaving lever is supplied, No. 5740.

| Size Nos. | For Chain, Inch | Height Overall, Inches | Width Overall, Inches | Size Base, Inches | Length Lever, Inches | Weight Each, Lbs. | Each |
|-----------|-----------------|------------------------|-----------------------|-------------------|----------------------|-------------------|---------|
| 0 | ¼ to ⅜ | 13 | 14⅝ | 8⅜x7⅝ | 27 | 96 | \$75.00 |
| 1 | ¼ to ½ | 16 | 18 | 10½x9½ | 33 | 120 | 90.00 |

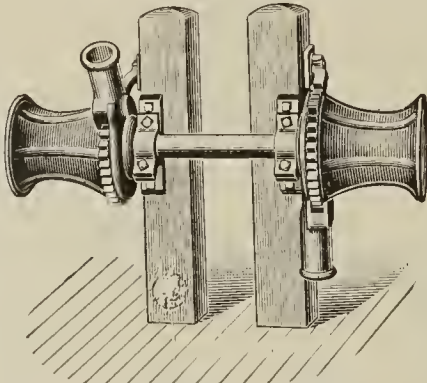
Note: When ordering, specify size of chain.

Winch head and wildcat are both on the same shaft and do not work independently.

Whether chain or manila cable is used with this windlass, care should be taken to see that the inboard or "bitter end" is securely fastened. Only BBB chain should be used as ordinary Proof Chain is not uniform enough in link measurement.

HAND POWER WINDLASSES

RATCHET
GYPSY



Designed for barges, schooners and small craft. Made with solid steel shafts and turned bearings. Bearings have oil holes in caps. Malleable iron drums and socket handles. Drums are provided with whelps for firmly gripping rope

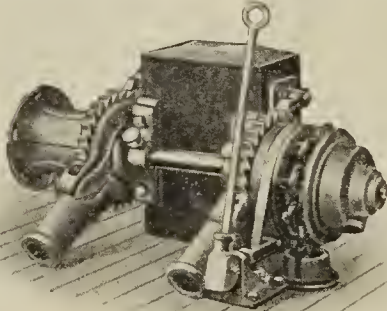
or cable; black japanned finish.

Single Head No. 573—Double Head No. 572

| Size Nos. | Length Head, Inches | Diam. Head Outside End, Inches | Width Overall, Inches | Size Chain, Inches | Each | |
|-----------|---------------------|--------------------------------|-----------------------|--------------------|-------------|-------------|
| | | | | | Single Head | Double Head |
| E | 5¼ | 4½ | 6 | ⅜ | \$10.50 | \$15.50 |
| D | 6 | 5 | 8 | ¼ | 11.50 | 17.00 |
| C | 6½ | 7½ | 10 | ⅝ | 13.50 | 19.00 |
| B | 7 | 7½ | 12 | ⅜ | 17.00 | 24.00 |
| 0 | 8 | 8½ | 12 | ⅜ | 24.00 | 30.00 |
| 1 | 9½ | 10 | 14 | ½ | 27.00 | 40.00 |
| 2 | 12 | 11½ | 16 | ⅝ | 31.00 | 53.00 |
| 2½ | 13 | 13 | 18 | ⅝ | 42.00 | 71.00 |
| 3 | 14½ | 13½ | 20 | ¾ | 49.00 | 83.00 |
| 3½ | 16½ | 14½ | 22 | ¾ | 61.00 | 100.00 |

For Galvanized Add \$0.08 per pound to List.

Note: Bitts are measured from outside to outside. Either one or two may be used. Windlasses made to order to any length bitt desired.



YACHT GYPSY
WITH LOOSE
WILDCAT
GALVANIZED

For use on cruisers, sailing vessels and smaller craft. Has tapered drum provided with whelps for firmly gripping rope or cable on one side and wildcat for chain with a hand brake on the other side. It has a

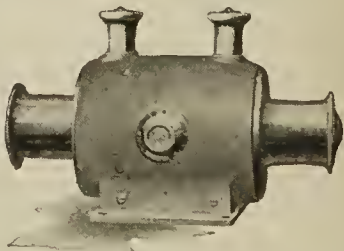
positive racket and the pawls will not slip. The shafts are of turned steel and the boxes are machined and fitted with grease cups. Furnished with deck pipe. Sample of chain must be furnished to insure proper fitting wildcat.

No. 210

| Size, Nos. | Bitts, Inches | Length of Head, Inches | Diam. of Head Outside End, Inches | Weight, Lbs. | Chain Size, Inches | Each |
|------------|---------------|------------------------|-----------------------------------|--------------|--------------------|----------|
| B | 12 | 7 | 7½ | 175 | ⅜ | \$100.00 |
| 1 | 14 | 8 | 8½ | 250 | ½ | 125.00 |

ELECTRIC YACHT WINDLASSES
HORIZONTAL

Compact, self contained, powerful boat and sail windlass. Operates automatically in handling loads. The normal capacity pull is 225 pounds at 27 feet per minute. Overall dimensions; length, 22 inches; width, 10¾ inches; height, 14¾ inches. Height from deck to center of shaft, 6 inches. Head diameter, 4½ inches. Furnished with ¼ H.P. motor in 12, 32 or 110 volts as ordered. Cut spur gearing. No space is required below decks. Enameled housing, bronze trim, polished bronze rope bollards and heads.



No. D—Weight, 120 Lbs. \$240.00
Note—Specify current voltage when ordering.

LIQUID COMPASSES

MOTOR BOAT STYLE



An extremely accurate compass mounted in a mahogany box; compass has an all brass case; corrugated bottom to compensate for extreme changes in temperature; sapphire jewel bearing; dial marked with degree circle as well as with the usual points.

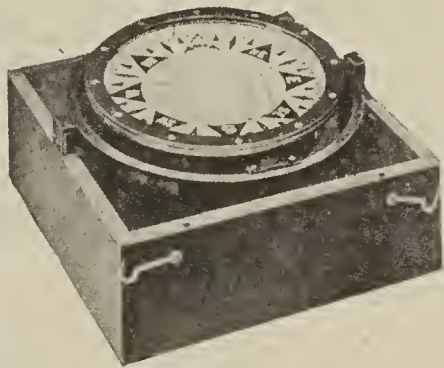
Box is of mahogany, lock jointed; cover fastens to box with brass hooks.

| Size, Nos. | Diameter Dial, Inches | Size Box, Inches | Weight Each Lbs. | Each |
|------------|-----------------------|------------------|------------------|--------|
| 1 | 2 | 4 3/4 x 4 3/4 | 1 3/4 | \$5.50 |
| 2 | 2 1/2 | 5 1/4 x 5 1/4 | 2 1/4 | 8.50 |
| 3 | 3 | 6 x 6 | 3 3/4 | 9.50 |
| 4 | 4 | 7 1/2 x 7 1/2 | 6 1/4 | 15.00 |
| 5 | 5 | 9 1/8 x 9 1/8 | 9 1/2 | 18.00 |

FLAT CARD

A very accurate and reliable instrument; carefully constructed; easy to adjust; quick and steady under all conditions.

The card is made with the central buoy supporting six magnetic needles, giving great magnetic force and making the compass much easier to adjust in iron ships; a ring engraved to degrees with upright figures surrounds the card; the divisions on the card are engraved to quarter points in the smaller sizes, and to eighth points in the larger sizes; degree card is supplied, graduated from 0-360 degrees, or 0-90 degrees in the four quadrants; case is of solid bronze; polished sapphire bearing; hard alloy pivot; can be furnished with square mahogany box with cover.

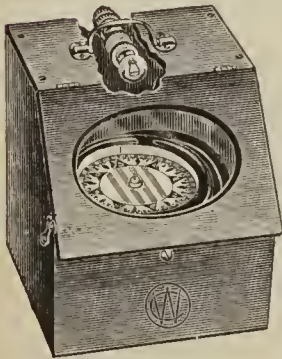


| Nos. | Size Card, Inches | Weight Each, Lbs. | Each With Box | Nos. | Size Card, Inches | Weight Each, Lbs. | Each With Box |
|------|-------------------|-------------------|---------------|------|-------------------|-------------------|---------------|
| 66 | 3 | 2 3/4 | \$22.50 | 56 | 7 | 13 3/4 | \$39.35 |
| 64 | 4 | 4 1/2 | 27.00 | 52 | 8 | 18 | 43.65 |
| 62 | 5 | 5 1/4 | 30.40 | 48 | 9 | 13 3/4 | 52.25 |
| 60 | 6 | 9 1/2 | 34.75 | .. | .. | .... | .... |

BINNACLES

WITHOUT COMPASSES

ELECTRIC AND OIL



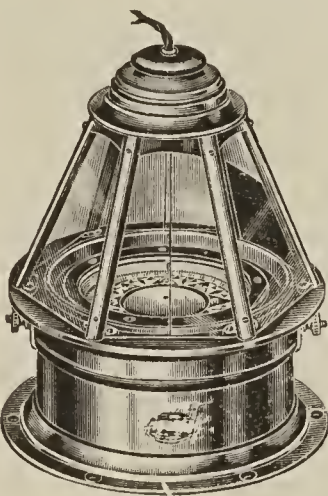
These binnacles are made of finely finished mahogany with heavy glass set in cover, which is fastened on at an angle to allow a full view of compass rose. All fastenings and hardware of brass so as not to affect the compass. Can be furnished in either electric or oil. The one fitted for electricity has the waterproof double contact socket set in at the upper part of the back. The binnacle for oil lamp, has a polished brass lamp on side.

| Nos. | For Compass Size, Inches | Binnacles, Each | For Electricity | For Oil |
|------|--------------------------|-----------------|-----------------|---------|
| 01 | 2 | | \$16.00 | \$22.50 |
| 02 | 2 1/2 | | 16.50 | 23.00 |
| 03 | 3 | | 17.00 | 23.50 |
| 04 | 4 | | 21.00 | 27.50 |
| 05 | 5 | | 22.50 | 29.00 |

Note—For prices on compasses to fit above binnacles see Liquid Compasses.

SKYLIGHT BINNACLES

FOR 4 OR 5 INCH COMPASS



Spun from extra heavy brass throughout. Complete with night hood, oil or electric lamp and compass.

Height overall, 12 inches
Diameter base, 9 5/8 inches
Distance between compass supports } 7 1/4 ins.
Weight, less Compass, 6 pounds
Will hold a 4 or 5 inch compass.

Fig. 534

PRICE EACH

| | Polished Brass | Nickel Plated | Chromium Plated |
|-----------------|----------------|---------------|-----------------|
| Without Compass | \$33.00 | \$37.00 | \$45.00 |

Larger Sizes on Application

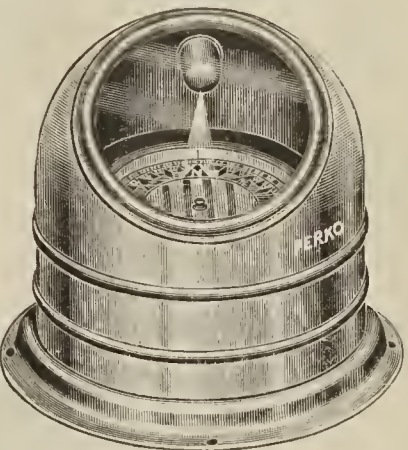
For Liquid Compasses to Fit Above, See Liquid Compasses.

CRUISER BINNACLES

WITHOUT COMPASSES

WROUGHT BRASS

Spun from heavy gauge brass, white enamel finish inside. An electric lamp for night running which illuminates the proper portion of the compass, but will not disturb the helmsman's vision in any way.



| For Size Compass, Inches | Height Overall, Inches | Diameter Base, Inches | Distance Between Compass Supports, Inches | Weight Lbs. |
|--------------------------|------------------------|-----------------------|---|-------------|
| 3 | 6 1/2 | 6 3/4 | 5 1/8 | 1 |
| 4 | 7 1/2 | 9 | 6 3/4 | 1 1/3 |
| 5 | 8 3/4 | 10 | 7 3/4 | 2 3/4 |

| For Size Compass, Inches | Polished Brass | Each Nickel Plated | Chromium Plated |
|--------------------------|----------------|--------------------|-----------------|
| 3 | \$12.50 | \$14.00 | \$16.50 |
| 4 | 14.00 | 16.00 | 19.00 |
| 5 | 15.50 | 18.00 | 21.50 |

Above Binnacle Furnished in Two-Piece Type, With Removable Head at \$2.00 Extra.

Note—For information on compasses to fit, refer to Liquid Compasses.

Compass Care

Great care should be used in handling the Compass. It ought never be exposed to the sun's hot rays for any length of time. When not in use (if not mounted in a binnacle) the Compass should be carefully put away. When stored for the Winter, the bowl should be unhung, and turned face down in the box.

It is most unwise for an inexperienced party to attempt to fill a Compass. If your Compass needs attention, it should be returned to the maker or dealer from whom it was purchased. Each manufacturer understands his own product best, and as he must stand behind it he should be the only one to repair it.

PIONEER COMPASSES

The Pioneer line of Marine Compasses offers high grade instruments for all types of boats. They are outstanding for their superior operation, quality of workmanship and material. There are a number of different models, each with several types of mountings making them conveniently adaptable to a wide range of boats.

A few of the models are illustrated below, the Sportway and Speedway for fast boats, and the Straightway with mountings for cruiser, sailboats and speedboats. The Pioneer fast boat compasses are modifications of standard aircraft compasses, designed to withstand the rough service and quick maneuvers of aircrafts which are similar to those of a fast boat.

STRAIGHTWAY TYPE 569



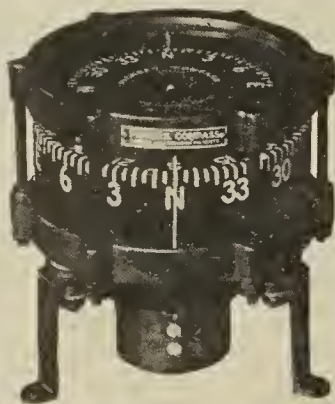
In this compass the card has been removed from the magnetic element and replaced by two radium painted parallel lines (2½ inches long). The 4½ inch radium painted card is mounted on a manually rotatable ring which is set on top of the compass, also carrying parallel lines. The magnetic element is set into the compass by rotating the ring and it is therefore observed as a right and left indicator. The Straightway is available with point or degree

card. Electric lighting from below is standard on binnacle mounts and may be had for other mountings (except box) at an additional charge of \$5.00 each.

| Mount | Height, Inches | Width, Inches | Each |
|--------------------|-------------------|------------------|----------|
| Speedboat Deck | 5½/16 | 4¾ | \$100.00 |
| Speedboat Bulkhead | 5½/16 | 4¾ | 100.00 |
| Bulkhead Gimbals | 4 | 7 | 125.00 |
| Box | 5¾/8 | 7 | 125.00 |
| Brass Binnacle | 8¼/4 | 8¼ | 145.00 |
| Chrome Binnacle | 8¼/4 | 8¼ | 155.00 |

SPEEDWAY TYPE 145

This compass is for fast boats only. It has two cards making it readable from either the top or the side, and is equipped with a Titterington Micrometer Compensator. This compass is finished in black and has a 3½ inch black card with radium-painted figures. It stands 5 inches high and is 5¾ inches wide.



| | Each |
|--------------------------------------|---------|
| Deck or Bulkhead Mount | \$65.00 |
| Lamp for Electric Illumination | 5.00 |



Please Specify Type of Mount When Ordering

SPORTWAY TYPE 383

This compass is similar to the Speedway, but is smaller and may be read only from the side. It is finished in black with a 2¾ inch radium-painted card. It stands 4¾ inches high; 3¾ inches wide and is equipped with a Titterington Micrometer Compensator.

| | Each |
|---|---------|
| Deck (illus.) Bulkhead or Overhead Mounting.... | \$40.00 |
| Lamp for Indirect Electric Illumination..... | 5.00 |

Please Specify Type of Mount When Ordering

PRISM BINOCULARS

I. ZEISS Night Glasses



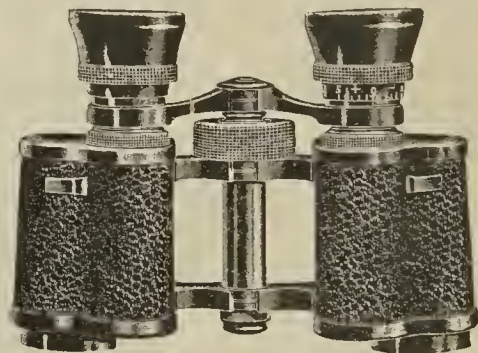
These glasses have an extraordinary high light transmitting quality. By reason of the large exit pupil of a diameter of over 7 m.m. in conjunction with a magnification of 7 times, these glasses have a high resolving power and bring into view distant details in comparative 'dark-

ness. They are of much value for use at night. Complete with black solid leather case with shoulder strap.

Price Each \$95.00

LAMONT PARIS

These are exceptionally well made imported instruments. Prisms and lenses are made of the finest optical glass. Solid construction throughout. Complete in sole leather case and straps.



| Nos. | Millimeters | Magnification, Times | Each |
|------|-------------|-------------------------|---------|
| 6834 | 26 | 8 | \$20.00 |
| 6748 | 34 | 8 | 40.00 |

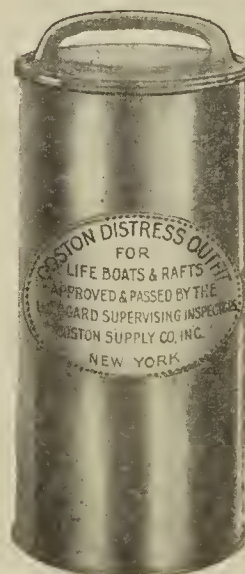
DISTRESS SIGNALS AND CONTAINERS

COSTON

This signal is especially treated with a preparation to withstand all moisture and atmospheric conditions known to be encountered. Will burn for a period exceeding two minutes, giving a brilliant glowing red light in excess of 750 candlepower, being visible at a great distance. The container is constructed of heavy copper, having a brass screw top with a convenient handle for carrying, etc. Made in two sizes.

| | Each |
|---------------------------|--------|
| Container with 12 Signals | \$8.00 |
| Container with 6 Signals | 7.00 |

Approved by the Steamboat Inspection Service



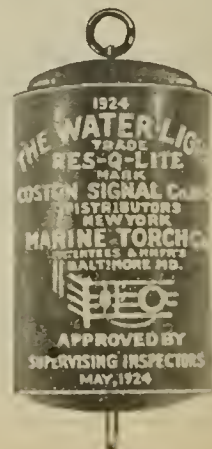
SELF-LIGHTING WATER LIGHT

COSTON RES-Q-LITE

Constructed of sheet copper and contains calcium carbide which when cast overboard either attached to a ring buoy or when opened by hand, burns brilliantly for 45 minutes. The light has a flame of 150 candlepower.

| | Each |
|------------------------------------|--------|
| Complete Ready for Operation | \$5.00 |

Approved by the Steamboat Inspection Service



COURSE PROTRACTORS



This protractor is clearly marked and exceptionally easy to read. Complete instructions for its use are printed right on the instrument. Has the scale of miles on the top edge and gives the course and distance at one reading.

Each
K.W. complete\$3.00

PARALLEL RULES

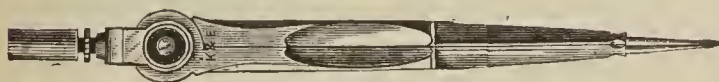


FOLDING

Made of ebonized hardwood with nickel plated brass bars attached with brass rivets.

| | |
|-------------------|--------|
| Length, Inches | Each |
| 12..... | \$1.50 |
| 18..... | 2.50 |

DIVIDERS



PARAGON—PLAIN

Made of high grade nickel steel with fine tool steel points; special pivot joint; knurled handle.

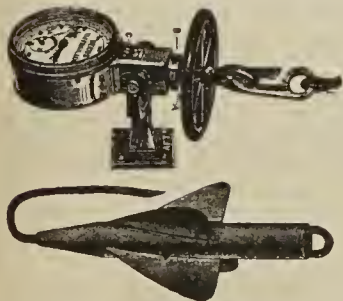
Each
No. 606—Size, 5¾ Inches; Weight Each, 2 Ounces..\$6.50

FAVORITE—PLAIN

Made of rolled nickel silved steel with steel points; plain pivot joint; knurled handle.

Each
No. 9540—Size, 5½ Inches; Weight Each, 2 Ounces \$0.85

TAFFRAIL LOGS



NEGUS IMPROVED

The most accurate taffrail log on the market. It will wear longer than any other because of the construction of the main shaft bearings, which are in two sets and composed of hard steel balls, running in hard steel cones and cups. The friction is always the same and does not change with wear,

consequently the register remains the same. If the main shaft bearings show a slight wear after considerable use, this can be adjusted without sending away for repairs. Gives a uniform register of speed.

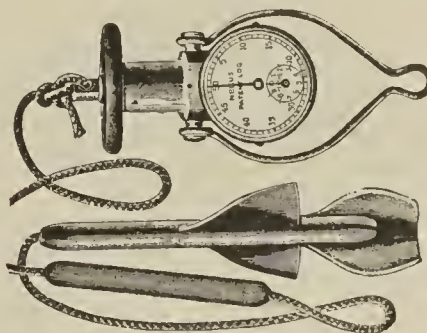
| | |
|---|---------|
| Log complete with register, rotator balance wheel | Each |
| and log line | \$44.00 |
| Extra rotator | 11.00 |
| Extra line | 8.50 |

Speed By Log

The regulation log glass runs 28 seconds; a knot is 6080 feet—one nautical mile.

Thus 3600 seconds: 28 seconds: 6080 feet: 47 feet, 3 inches, which makes a knot 47 feet, 3 inches on the log line.

YACHT LOGS



NEGUS

A reliable instrument, well made to give satisfactory results at average yachting speeds. All parts are made of brass, except the governors which are of lead.

| | |
|---------------------------------|--------------|
| No. 470K—Registering Knots..... | Each \$20.00 |
| No. 470M—Registering Miles..... | 20.00 |

STRAP RUDDER BRACES

GALVANIZED
MALLEABLE IRON AND
POLISHED BRASS

Strap and pintle strongly made; furnished with holes for mounting.



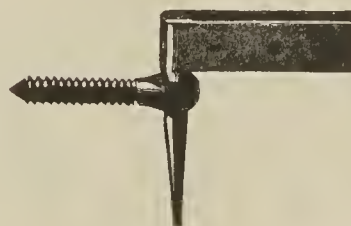
No. 458

| Size, Nos. | Distance Between Strap, Inches | Weight per Set, Lbs. | Per Set of 4 Pieces, Galvanized |
|---------------|--------------------------------------|----------------------------|---------------------------------------|
| 00 | 5/8 | 3/4 | \$0.50 |
| 0 | 3/4 | 7/8 | .65 |
| 1 | 7/8 | 1 1/2 | 1.00 |
| 2 | 1 | 2 | 1.30 |
| 3 | 1 1/4 | 2 | 1.60 |
| 4 | 1 1/2 | 2 1/2 | 2.30 |

PARTS

| Size, Nos. | Galvanized, per Pair— | |
|---------------|-----------------------|----------------|
| | Pintles Only | Straps Only |
| 00 | \$0.40 | \$0.25 |
| 0 | .50 | .33 |
| 1 | .70 | .50 |
| 2 | .90 | .60 |
| 3 | 1.10 | .75 |
| 4 | 1.50 | 1.05 |

SCREW RUDDER BRACES

GALVANIZED
MALLEABLE IRON AND
POLISHED BRASS

Gudgeon and pintle strongly made; heavy lag screw threads; pintle provided with three holes for mounting rudder blade.

No. 459

| Size, Nos. | Galvanized, per Pair— | |
|---------------|-----------------------|-----------------|
| | Pintles Only | Gudgeon Only |
| 1 | \$0.30 | \$0.17 |
| 2 | .38 | .24 |
| 3 | .70 | .28 |
| 4 | .75 | .28 |



RUDDER PORTS

SOLID BRONZE WITH STUFFING BOX

Made of solid bronze; provided with stuffing box and flange; holes through flange are reinforced with extra metal; hexagonal nut on stuffing box for adjusting.

| Size, Inches | Each | Size, Inches | Each |
|-----------------|--------|-----------------|--------|
| 1 | \$5.50 | 1 1/4 | \$7.50 |
| 1 1/8 | 6.00 | 1 1/2 | 9.00 |

RUDDER SLEEVES



SOLID BRONZE—WITH STUFFING BOX

Used for lower end of rudder post. Made of solid bronze; provided with stuffing box, with hexagonal nut and set screw. Threaded pipe has milled groove which keeps stuffing box from turning after once being adjusted; has long threaded end for making adjustment through stern of boat. When ordering state length of sleeve required, also length of thread on lower end of sleeve.

| Diameter of Rudder, Stock, In | Length Overall, Inches | Each | Extra for Longer Pipe Per Inch |
|-------------------------------------|------------------------------|--------|--------------------------------------|
| 1 | 9 | \$6.00 | \$0.15 |
| 1 1/8 | 9 | 7.50 | .24 |
| 1 1/4 | 9 | 7.50 | .24 |
| 1 1/2 | 12 | 8.75 | .30 |
| 1 3/4 | 12 | 9.40 | .36 |
| 2 | 12 | 9.40 | .36 |

Note: Lock nuts for threaded end furnished at \$1.00 per pair.

QUADRANT TILLERS

Made of either malleable iron galvanized or plain or polished brass. Malleable iron quadrants have drop forged clamping plate. Arms are reinforced by ribs; quadrant has two grooves with slots for fastening tiller rope; has adjustable square hole and two clamping screws.



No. 465

| Size Nos. | Radius, Inches | Size Adjust- able Hole, Inches | Weight Each, Lbs. | Each | |
|--------------|-------------------|--------------------------------------|-------------------------|------------|-------------|
| | | | | Galvanized | Plain Brass |
| *0 | 7 | 9/16 to 3/4 | 3 | \$2.00 | \$5.00 |
| 1 | 10 | 9/16 to 1 | 6 3/8 | 3.50 | 7.00 |
| 2 | 12 | 3/4 to 1 1/4 | 8 1/4 | 5.00 | 10.00 |
| 3 | 15 | 3/4 to 1 1/4 | 13 3/8 | 7.50 | 14.00 |
| 4 | 18 | 1 to 1 3/8 | 26 | 13.00 | 24.00 |
| 5 | 24 | 1 1/2 to 1 3/4 | 51 1/2 | 25.00 | 45.00 |

*Cast iron only.

STRAIGHT TILLERS



One piece; made of either malleable iron, galvanized or brass; plain or polished finish; square hole with set screw.

No. 466

| Size, Nos. | Length, Inches | Size Hole, Inch | Each | |
|---------------|-------------------|--------------------|------------|-------------|
| | | | Galvanized | Plain Brass |
| 1 | 10 | 9/16 | \$1.25 | \$2.25 |
| 2 | 12 | 13/16 | 1.75 | 2.50 |
| 3 | | 13/16 | 2.25 | 5.00 |

RUDDERS

SPEED BOAT AND RUNABOUT TYPE—CAST BRONZE

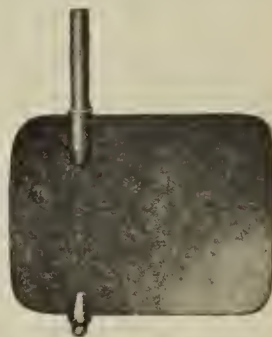
Can also be used for bow rudder on hydroplanes and light displacement racers; made of cast manganese bronze; blade and stock cast in one piece; completed with tiller, pipe and stuffing box for port; regularly furnished with 12-inch stock.



| Nos. | Size Blade, Inches | For Boat Length, Feet | Diameter Stock, Inches | Length Tiller, Inches | Each | | Longer Stock Per Inch |
|------|--------------------------|--------------------------------|------------------------------|-----------------------------|--------------------------------------|----------|--------------------------------|
| | | | | | Rudder with 12 Inch Stock Only | Complete | |
| 701 | 9x14 | 16 to 22 | 1 | 12 | \$10.10 | \$20.90 | \$0.12 |
| 702 | 10x16 | 20 to 26 | 1 | 12 | 12.80 | 22.60 | .12 |
| 703 | 11x18 | 26 to 25 | 1 1/8 | 14 | 14.50 | 25.40 | .15 |
| 704 | 12x20 | 30 to 40 | 1 1/4 | 16 | 19.20 | 31.90 | .20 |

CRUISER AND POWER BOAT TYPE CAST BRONZE

Made of the best quality cast manganese bronze; recommended for all kinds of power boats; most efficient pattern for cruisers; perfect casting.



| Nos. | Size, Inches | Blade Thickness, Inches | Diam. of Stock, Inches | Length of Stock, Inches | Each | Longer Stocks, per Inch |
|------|-----------------|-------------------------------|------------------------------|-------------------------------|---------|-------------------------------|
| 401 | 16 x 16 | 1/4 | 1 | 12 | \$16.00 | \$0.12 |
| 402 | 18 x 16 | 1/4 | 1 | 12 | 17.00 | .12 |
| 403 | 18 x 18 | 1/4 | 1 | 12 | 19.00 | .12 |
| 404 | 20 x 18 | 1/4 | 1 1/4 | 18 | 21.00 | .20 |
| 405 | 20 x 20 | 1/4 | 1 1/4 | 18 | 24.00 | .20 |
| 406 | 22 x 18 | 1/4 | 1 1/4 | 18 | 24.00 | .20 |
| 407 | 22 x 20 | 3/8 | 1 1/4 | 18 | 32.00 | .20 |
| 408 | 22 x 22 | 3/8 | 1 1/4 | 18 | 33.00 | .20 |
| 409 | 24 x 20 | 3/8 | 1 1/4 | 18 | 33.00 | .20 |
| 410 | 24 x 22 | 3/8 | 1 1/4 | 18 | 33.50 | .20 |
| 411 | 24 x 24 | 3/8 | 1 1/4 | 18 | 34.50 | .20 |
| 412 | 24 x 26 | 3/8 | 1 1/2 | 22 | 50.00 | .24 |
| 413 | 26 x 26 | 3/8 | 1 1/2 | 22 | 50.00 | .24 |

GALVANIZED

Galvanized posts are split and firmly riveted to blade; bottom guide post is provided with hole and cotter pin to prevent post from pulling out of shoe and being installed.

No. 464



| Size, Nos. | Size Blade, Inches | Length Rudder Post, Ins. | Weight Each Lbs. | Each |
|---------------|-----------------------|-----------------------------|---------------------|--------|
| 0 | 12x12x1/8 | 40 | 11 | \$4.25 |
| 1 | 14x14x1/8 | 42 | 13 | 5.00 |
| 2 | 16x16x3/16 | 48 | 24 | 7.00 |
| 3 | 18x18x3/16 | 52 | 32 | 10.00 |

RUDDER STUFFING BOXES

Made of cast brass and threaded to fit the pipes furnished with galvanized rudders.

| Size, Nos. | Weight Each, Ounces | Each |
|---------------|------------------------|--------|
| 0 | 4 | \$0.50 |
| 1 | 4 | .50 |
| 2 | 5 | .60 |
| 3 | 5 | .60 |

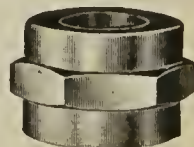
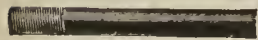


Fig. 464-B

RUDDER PIPES

No. 464A—GALVANIZED

Hot galvanized steel tubing with running thread; can be turned directly into the wood or used with lock nuts.



| Size, Nos. | Length Inches | Weight Lbs. | Each |
|---------------|------------------|-----------------|--------|
| 0 | 12 | 1 $\frac{3}{8}$ | \$1.00 |
| 1 | 12 | 1 $\frac{3}{8}$ | 1.00 |
| 2 | 15 | 2 | 1.50 |
| 3 | 18 | 2 $\frac{1}{2}$ | 1.75 |

RUDDER SHOES

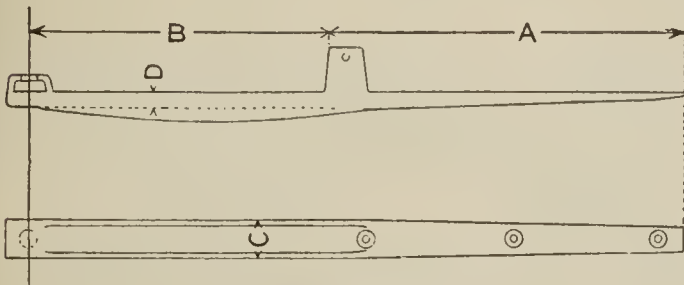
GALVANIZED

Forged from wrought iron, heavily galvanized.



No. 4642

| Size Nos. | Size, Inches | | | Weight Each, Lbs. | Each Galvanized |
|--------------|--------------|-----------------|---------------|----------------------|--------------------|
| | Length | Width | Thickness | | |
| 0 | 24 | 1 $\frac{1}{2}$ | $\frac{3}{8}$ | 4 $\frac{1}{2}$ | \$2.00 |
| 1 | 30 | 1 $\frac{3}{4}$ | $\frac{1}{2}$ | 8 $\frac{3}{4}$ | 3.00 |
| 2 | 42 | 2 | $\frac{5}{8}$ | 17 | 4.00 |



CAST BRONZE

Cast from manganese bronze and reinforced throughout; made with "U" so shoe can be bolted through cross grain of wood, as well as having lag screws screwed into lateral grain of keel; no extra charge for drilling holes; hundreds of special shoe patterns carried in stock; send sketch for quotation of special castings.

| Nos. | Dimensions, Inches | | | | Price Rough |
|------|--------------------|----|-----------------|----------------|----------------|
| | A | B | C | D | |
| 391 | 18 | 14 | 2 | $\frac{1}{4}$ | \$6.50 |
| 392 | 20 | 15 | 2 $\frac{1}{4}$ | $\frac{5}{16}$ | 7.50 |
| 393 | 21 $\frac{1}{2}$ | 16 | 2 $\frac{1}{2}$ | $\frac{3}{8}$ | 10.00 |
| 394 | 24 | 17 | 2 $\frac{3}{4}$ | $\frac{1}{2}$ | 12.00 |
| 395 | 26 | 18 | 3 | $\frac{1}{2}$ | 15.00 |
| 396 | 28 | 20 | 3 | $\frac{1}{2}$ | 18.00 |

RUDDER COLLARS



BRASS

Solid brass with set screw for fastening to rudder post.

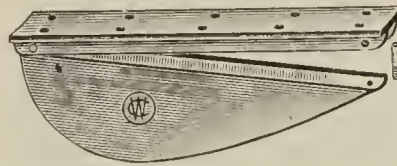
| Size Hole, Inch | Each | Size Hole, Inch | Each | Size Hole, Inch | Each |
|--------------------|--------|--------------------|--------|--------------------|--------|
| 1 | \$1.00 | 1 $\frac{1}{4}$ | \$1.25 | 1 $\frac{1}{2}$ | \$1.80 |
| 1 $\frac{1}{8}$ | 1.00 | 1 $\frac{3}{8}$ | 1.50 | ... | .... |

Use of Quadrants

The advantage of the quadrant over the tiller lies in the fact that when the former is used the tiller line pulls around the arc of a circle. This makes the tension uniform at all points, and the line does not slacken up.

OUTBOARD FINS

DETACHABLE



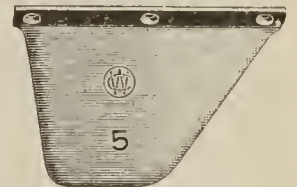
Instantly removable, non-vibrating fin. The machined blade snugly fits into a machined base. Made of salt water resisting aluminum alloy and polished. Two screws hold blade securely—yet are easily removed. Base is 14x1 $\frac{1}{2}$ inches with drilled, countersunk screw holes and is slightly curved to fit boat bottom. Size of blade, 14x5 inches.

No. 30—Weight Each, 1 $\frac{1}{8}$ Lbs. \$3.00

Note—Blades only can be supplied for \$1.50 each and bases for \$1.75 each.

SOLID

Made of special aluminum alloy—will withstand action of salt water; stiff but light. It is of a "Streamline" design so as not to retard speed on "Straightaway." Large blade area prevents "side slipping" and permits greater speed on turns. Thick enough to insure necessary stiffness and eliminates possibility of bending under pressure. Base plate has countersunk screw holes for fastening with bolts or screws.



| Size of Base, Inches | Depth, Inches | Weight, Ounces | Each |
|----------------------------|------------------|-------------------|--------|
| 8 $\frac{3}{4}$ x2 | 5 $\frac{3}{4}$ | 15 | \$1.75 |

BUOY RODS

No. 862



Made of galvanized wrought iron with solid loop on one end and swivel loop on the other end; complete with top and bottom plates and nuts.

| Length Under Eye, Inches | Diameter Rod, Inch | Each | Length Under Eye, Inches | Diameter Rod, Inch | Each |
|-----------------------------------|--------------------------|--------|-----------------------------------|--------------------------|--------|
| 18 | $\frac{1}{2}$ | \$1.90 | 24 | $\frac{5}{8}$ | \$2.50 |
| 20 | $\frac{1}{2}$ | 2.00 | 30 | $\frac{5}{8}$ | 2.75 |

PICK UP BUOYS

FLAT TOP

Made of extra heavy black iron; galvanized after being formed; absolutely watertight; has a loose ring on the bottom and a large loop on the top for picking up.

| Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|-----------------|----------------------|--------|
| 1 | 9x14 | 4 | \$4.00 |
| 2 | 12x18 | 5 | 4.75 |
| 3 | 13x22 | 7 | 5.75 |



CONE TOP

Made of extra heavy black iron; galvanized after being formed; absolutely watertight; solid ring on the bottom and large loop on the top for picking up.

| Nos. | Size, Inches | Weight Each, Lbs. | Each |
|------|-----------------|----------------------|--------|
| 4 | 13x22 | 5 | \$3.00 |
| 5 | 16x24 | 6 | 4.00 |



PICK UP BUOYS



SOLID CORK

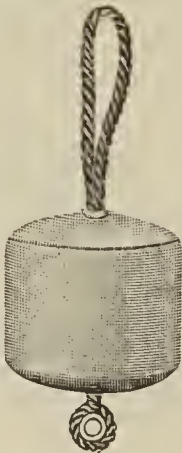
Made up of solid pieces of cork; rope runs through center and has a large loop on one end and small loop on the other end with galvanvanized thimble.

| Nos. | Size, Inches | Each |
|------|--------------|--------|
| 10 | 9x 9x 9 | \$3.00 |
| 11 | 12x12x12 | 4.25 |

CANVAS—CORK FILLED

Made with an interior filling of ground cork; outside covering of heavy canvas; large loop on one end and loop with galvanvanized thimble on other end; exceptionally light in weight and very buoyant.

| N os. | Diameter, Inches | Height, Inches | Each |
|-------|------------------|----------------|--------|
| 5862 | 10 | 8 | \$3.00 |
| 5863 | 12 | 10 | 4.25 |



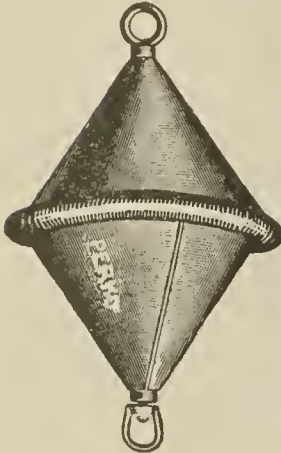
MOORING BUOYS

GALVANIZED
No. M66—DOUBLE POINTED

Made from black iron and galvanvanized after being formed; extra heavy construction throughout; absolutely watertight.

Has a solid loop on one end and a swivel loop on the other end; furnished with and without a rubber bumper.

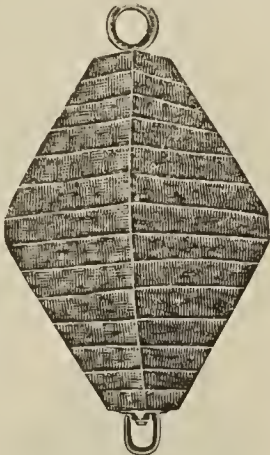
| | | Weight Each, Lbs. | Each | |
|---------------|----------------|-------------------|-------------|----------------|
| Diam., Inches | Length, Inches | | With Bumper | Without Bumper |
| 16 | 24 | 15 | \$15.00 | 11.00 |
| 20 | 30 | 20 | 18.50 | 14.00 |
| 24 | 36 | 31 | 24.00 | 20.00 |
| 30 | 36 | 45 | 27.50 | 24.00 |



SOLID CORK

Made up of solid pieces of cork; galvanvanized iron rod runs through center and has a solid ring at one end and swivel at the other end.

| Nos. | Size, Inches | Each |
|------|--------------|--------|
| 00 | 6x 6x12 | \$4.75 |
| 0 | 8x 8x16 | 7.00 |
| 1 | 12x12x24 | 9.60 |
| 2 | 16x16x30 | 18.00 |
| 3 | 20x20x40 | 30.00 |

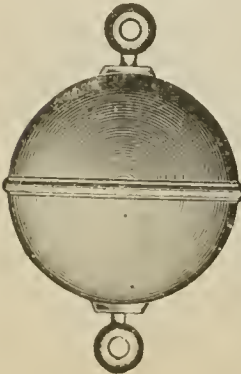


HEAVY STEEL BUOY

Constructed of heavy gauge steel, parts electric welded together. Eye bolts welded on each end.

Painted with a non-corrosive grey paint. Will withstand excessive and rough usage.

| Size, Inches | Each |
|--------------|--------|
| 18 | \$6.00 |



FENDERS

CANVAS
Style 6877

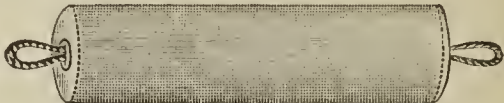


Heavy canvas outside, filled with cork and well sewn; has brass grommet in one end.

| Size, Inches | Weight Each, Ounces | Each |
|--------------|---------------------|--------|
| 3 x12 | 8 | \$0.45 |
| 3½x15 | 14 | .70 |

CANVAS
Style 6879

Heavy canvas outside, filled with cork and well sewn, has rope loop on each end.



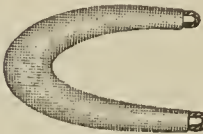
| Size, Inches | Weight Each, Lbs. | Each | Size, Inches | Weight Each, Lbs. | Each |
|--------------|-------------------|--------|--------------|-------------------|--------|
| 4x16 | 1½ | \$1.15 | 8x22 | 5½ | \$2.00 |
| 5x18 | 2½ | 1.45 | 10x24 | 10½ | 4.15 |
| 6x22 | 4 | 1.75 | 12x30 | 22 | 6.75 |

CANVAS FENDER COVERS

These can be removed and washed.

| For Fender, Inches | Price, Each |
|--------------------|-------------|
| 4 x 16..... | \$0.60 |
| 5 x 18..... | .75 |
| 6 x 22..... | .90 |
| 8 x 22..... | 1.00 |
| 10 x 24..... | 1.25 |

CANVAS BOW
Style 6885

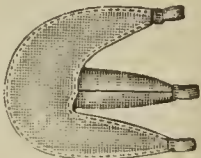


Has outside covering of heavy canvas, well sewn; filled with ground cork. Loop on both ends for attaching rope.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 2 x16 | \$1.00 | 3x30 | \$1.50 |
| 2½x22 | 1.25 | ..... | ..... |

TRIPOD BOW
Style 6887

Has outside covering of heavy canvas or rawhide, well sewn; filled with ground cork. Loop on each end for attaching rope.



| Size, Nos. | Size, Inches | Outside Covering | Each |
|------------|--------------|------------------|--------|
| 1 | 3x 8 | Canvas | \$1.25 |
| 2 | 4x12 | Canvas | 1.75 |
| 1 | 3x 8 | Rawhide | 2.75 |
| 2 | 4x12 | Rawhide | 3.60 |

NETTED BOW
Style 6889

Made of heavy sail duck filled with fibre, and netted with cotton or manila rope. Dimensions given are thickness at center and length from tip to tip.



| Size, Inches | Manila, Each | Cotton, Each |
|--------------|--------------|--------------|
| 3 x20 | \$3.00 | \$3.75 |
| 3½x24 | 3.75 | 4.50 |
| 4 x30 | 4.50 | 6.00 |

FENDERS

NETTED TARRED ROPE

Made of an interior filling of ground cork, packed into a strong burlap bag, and netted on the outside with a good quality tarred ratline or manila rope.

| Nos. | Length, Inches | Each | |
|------|-------------------|-----------------|-------------------|
| | | Plain Manila | Tarred Ratline |
| 1 | 16 | \$4.50 | \$4.10 |
| 2 | 18 | 5.25 | 4.50 |
| 3 | 20 | 6.00 | 5.25 |
| 4 | 22 | 6.75 | 6.00 |



NETTED

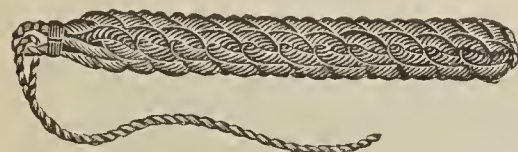
Outside covering is manila or cotton rope woven into a close net; filled with cork; has rope loop at each end.



| Size, Inches | Each | | Size, Inches | Each | |
|-----------------|----------------|----------------|-----------------|----------------|----------------|
| | Manila Rope | Cotton Rope | | Manila Rope | Cotton Rope |
| 3x12 | \$2.10 | \$2.85 | 8x22 | \$6.25 | \$7.75 |
| 4x16 | 3.25 | 3.80 | 10x24 | .... | .... |
| 5x18 | 4.15 | 5.00 | 12x30 | .... | .... |
| 6x22 | 5.15 | 7.00 | ..... | .... | .... |

MANILA
BRAIDED

Made of manila rope, braided; has a loop at one end.



| Nos. | Length Inches | Weight Each, Lbs. | Each | Nos. | Length, Inches | Weight Each, Lbs. | Each |
|------|------------------|----------------------|--------|------|-------------------|----------------------|--------|
| | | | | | | | |
| 1 | 12 | 12½ | \$0.80 | 3 | 18 | 15½ | \$1.30 |
| 2 | 16 | 14 | 1.00 | 4 | 20 | 17 | 1.65 |

CANVAS BUCKETS

Very useful on board ships, small boats, etc.; easily stowed away as it takes up but little space when folded.

Made of heavy canvas with galvanized iron ring reinforcing the top and rope carrying handles attached. Furnished with plain canvas or wooden bottom.



| Type of Bottom | Capacity, Quarts | Each |
|-------------------|---------------------|--------|
| Canvas | 10 | \$1.25 |
| Wooden | 10 | 2.25 |

FIBRE PAILS

These pails are fitted with riveted ears and strong bail handles. Manufactured from genuine wood pulp and treated by a special process. Glazed finish inside and outside therefore easy to clean.

No. 5563

| Height, Inches | Diam., Inches | Capacity, Quarts | Each |
|-------------------|------------------|---------------------|--------|
| 10½ | 11 | 12 | \$2.50 |



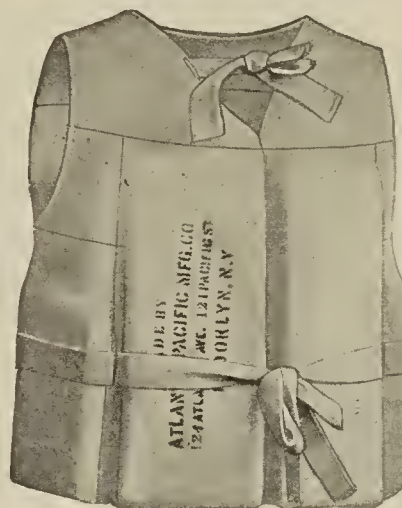
LIFE PRESERVERS

NEW REGULATION
U. S. GOVERNMENT
INSPECTED

Jacket type; made in accordance to U. S. Government Steamboat Inspection Service specifications.

It is reversible and fits the wearer snugly. The body portion is filled with solid cork blocks; strong construction throughout.

Each preserver is inspected, approved and stamped by a U. S. Government inspector before leaving the factory.



| Nos. | Size | Weight Each, Lbs. | Each |
|------|----------|-------------------|--------|
| 1 | Adults | 7 | \$1.75 |
| 2 | Children | 3¾ | 1.50 |

KAPOK
SPEED BOAT TYPE

Made especially for the motor boat trade and wherever a life preserver is required that will fit snugly to the body, permitting a coat to be worn over it. Made in four sizes; cover is khaki, strongly sewed and well finished. Filling is kapok, a silky downy vegetable fibre of exceptional life and resiliency, absolutely non-absorbent and its buoyance is 25 to 1 or six times greater than cork.



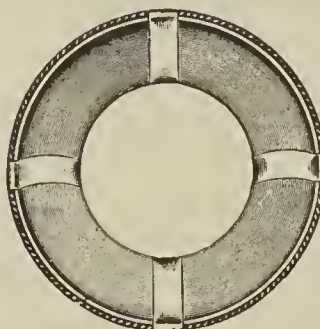
| Size, Nos. | Chest, Inches | Weight Each, Lbs. | Each |
|---------------|------------------|----------------------|--------|
| 1 | 24 to 30 | .. | \$3.00 |
| 2 | 32 to 36 | .. | 3.00 |
| 3 | 38 to 42 | .. | 3.00 |
| 4 | 44 to 48 | .. | 3.00 |

RING BUOYS

CORK

Made of solid or consolidated cork with a heavy covering which is sewed with linen thread; strong rope firmly attached all around.

The thirty-inch solid cork ring buoy fills the government requirements for ocean going vessels; the consolidated cork buoy fulfills the government's requirements for rivers and lakes.



| Nos. | Outside Diam., Inches | Inside Diam., Inches | Weight Each, Lbs. | Each | |
|------|--------------------------|-------------------------|----------------------|---------|---------|
| | | | | Consol. | Solid |
| 5825 | 15 | 7½ | 2½ | \$2.70 | .... |
| 5826 | 17 | 8½ | 3 | 3.00 | .... |
| 5827 | 19 | 10 | 4 | 3.40 | .... |
| 5828 | 21 | 11 | 5 | 3.75 | .... |
| 5829 | 24 | 12 | 5½ | 4.20 | .... |
| 5830 | 27 | 14 | 8 | 4.80 | .... |
| 5831 | 30 | 17 | 12 | 5.25 | *\$7.50 |

* Government inspected and stamped.

LIFE PRESERVER PILLOWS



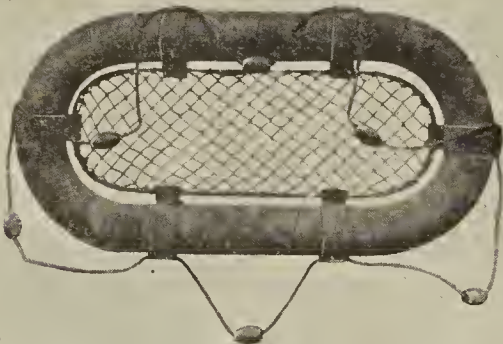
A soft downy pillow; covered with strong artificial leather and filled with a highly buoyant fibre; plain stitched or beaded edge.

Approved by the U. S. Government Steamboat Inspection Service for use as a life preserver on pleasure boats.

Note: When ordering, specify whether red, tan or green colored covering is desired.

| | | |
|----------------|-------------|------|
| Size 16" x 16" | Plain edge | Each |
| | Beaded edge | 1.25 |
| | | 1.50 |

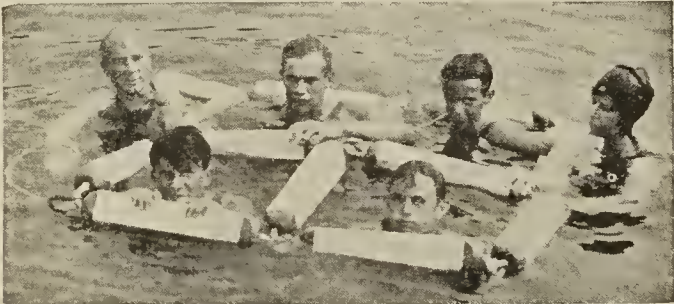
LIFE RAFTS



Will support five persons; are light and easy to handle and no matter how badly damaged, they will retain their buoyancy. Are approved by the Steamboat Inspection Service and pass inspection on inland, river and coastwise steamers. Consists of a solid elliptical ring of Balsa wood, covered with heavy, painted canvas. Net platform on the inside of the float is supported from the ring by heavy canvas straps. Length, 5 feet; width, 2½ feet, diameter, 6 inches; capacity, 5 persons. Ideal for yachts of all types. Occupy but little space on deck or cabin top.

Each

No. 5—Weight Each, 40 Lbs.\$100.00



RENOCO FOLDING LIFE RAFT

For water sports and emergency use. Can be used as swimming raft. Very light when folded, can be placed in cock pit, within easy reach for emergencies.

| | | |
|----------------|---------------|--------|
| 1 Square Raft | 1-2 Persons | Each |
| 2 Square Raft | 2-4 Persons | 12.00 |
| 4 Square Raft | 4-8 Persons | 21.00 |
| 6 Square Raft | 8-10 Persons | 36.00 |
| 9 Square Raft | 11-15 Persons | 51.00 |
| 16 Square Raft | 16-25 Persons | 72.00 |
| | | 120.00 |

SAILORS' PALMS

Furnished in the various styles as listed below.

When ordering, always specify whether right hand or left hand; right hand furnished, unless otherwise specified.



| | Description | Weight per Dozen, Lbs. | Per Dozen |
|---|--------------------------------------|---------------------------|--------------|
| | Common Hide, Iron Thimble | 1¾ | \$3.50 |
| 2 | Regular Hide, Iron Thimble | 1¾ | 4.00 |
| 3 | Plain Brass, Iron Thimble | 2 | 4.80 |
| 4 | Brass and Hide, Iron Thimble | 2 | 6.00 |
| 5 | Regular Hide with Buck, Iron Thimble | 2¼ | 5.20 |
| 6 | Regular Hide, Roping, Iron Thimble | 1¾ | 5.40 |

LIFE PRESERVER CUSHIONS



DOUBLE

Can be laid out flat and used as a double seat or one half may be turned up for a back rest.

Has a well stitched covering of khaki, duck or artificial leather; filled with a soft, downy, buoyant fibre.

Approved by the U. S. Government Steamboat Inspection Service for use as a life preserver on pleasure boats such as yachts, motor launches, sail boats, canoes, rowboats etc.

| Nos. | Size Seat, Inches | Size Back, Inches | Weight Each, Lbs. | Each | | |
|------|-------------------|-------------------|-------------------|--------|--------|----------------|
| | | | | Khaki | Duck | Artif. Leather |
| 5 | 12x14 | 12x14 | 3 | \$3.75 | \$3.75 | \$4.25 |
| 6 | 12x14 | 12x18 | 4 | 4.25 | 4.25 | 5.00 |
| 7 | 14x14 | 14x14 | 4 | 4.75 | 4.75 | 5.75 |
| 8 | 14x14 | 14x20 | 5 | 5.75 | 5.75 | 7.00 |

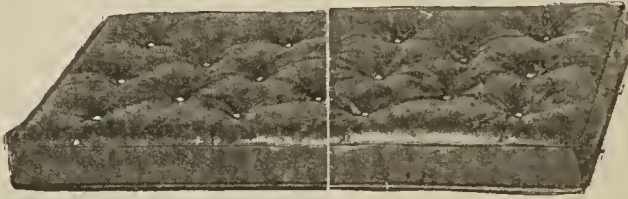


SINGLE

Well stitched covering of khaki, duck or artificial leather filled with a soft, downy, buoyant fibre. Approved by the government as life preservers on pleasure craft.

| Nos. | Size, Inches | Weight Each, Lbs. | Each | | |
|------|--------------|-------------------|--------|--------|----------------|
| | | | Khaki | Duck | Artif. Leather |
| 1 | 12x14 | 1½ | \$1.75 | \$1.75 | \$2.00 |
| 2 | 12x18 | 2½ | 2.25 | 2.25 | 2.75 |
| 3 | 14x14 | 2 | 2.25 | 2.25 | 2.75 |
| 4 | 14x20 | 3 | 3.25 | 3.25 | 4.00 |

BOAT CUSHIONS



FOR YACHTS AND LAUNCHES

All seams have a corded welt so that they will not rip; non-corrosive tufting buttons used to match material; all cushions equipped with handles. Approximately 3½ inches thick. An extra charge of \$0.05 per foot measuring around cushion for life-line will be made.

Per Square Foot

Khaki or Brown Duck, Both Sides.....\$1.40

Artificial Leather, Duck Bottom..... 1.60

Artificial Leather, Both Sides..... 1.75

Figured Denim, Both Sides..... 1.75

Corduroy or Velour, Duck Bottom..... 2.25

Tapestry, Mohair Plush, or Genuine Leather, on Application.

CUTTING PUNCHES



To be used with sheet brass grommets bearing the same numbers; for rolled

rim tubes use a cutter one size larger. Made of steel; use a wooden mallet when hammering.

| Diam. Hole, Nos. Inch | Each | Diam. Hole, Nos. Inch | Each | Diam. Hole, Nos. Inches | Each |
|--------------------------|--------|--------------------------|--------|----------------------------|--------|
| 00 $\frac{3}{16}$ | \$1.80 | 4 $\frac{7}{16}$ | \$2.30 | 9 $\frac{15}{16}$ | \$5.50 |
| 0 $\frac{1}{4}$ | 1.80 | 5 $\frac{1}{2}$ | 2.50 | 10 $1\frac{1}{4}$ | 28.50 |
| 1 $\frac{5}{16}$ | 1.90 | 6 $\frac{3}{4}$ | 3.50 | 11 $1\frac{1}{2}$ | 34.00 |
| 2 $\frac{11}{32}$ | 1.95 | 7 $1\frac{1}{16}$ | 3.70 | 15 2 | 41.00 |
| 3 $\frac{3}{8}$ | 2.20 | 8 $\frac{7}{8}$ | 4.70 | .. | ... |

CURTAIN FASTENERS



Double Curtain Fastener



Single Curtain Fastener



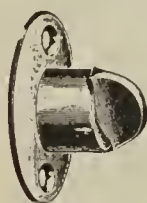
Eyelet



Washer

Made of wrought brass, polished finish; fastener has two screw holes in base; size of base, $\frac{1}{2} \times 1\frac{1}{4}$ inches.

| Nos. | For | Per Gross |
|------|-----------------|-----------|
| 10 | Single Curtains | \$10.20 |
| 12 | Double Curtains | 13.20 |



Double Curtain Fastener



Single Curtain Fastener



Eyelet



Washer

Made of cast brass, polished finish; fastener has two screw holes in base; size of base, $1\frac{1}{8} \times 1\frac{1}{8}$ inches.

| Nos. | For | Per Dozen on app. |
|------|-----------------|-------------------|
| 1 | Single Curtains | on app. |
| 2 | Double Curtains | on app. |



RINGS

Furnished in hot galvanized wrought or malleable iron. Smaller rings for awning. Curtain and canvas work; larger rings for use with jibs, chains, etc.

Malleable Iron—Galvanized

| Size, Inch | No. in a Box | Per Gross | Size, Inches | No. in a Box | Per Gross |
|---------------|--------------|-----------|----------------|--------------|-----------|
| $\frac{3}{8}$ | 144 | \$0.50 | $1\frac{1}{4}$ | 144 | \$4.00 |
| $\frac{1}{2}$ | 144 | .90 | $1\frac{1}{2}$ | 144 | 6.75 |
| $\frac{5}{8}$ | 144 | .95 | $1\frac{3}{4}$ | 72 | 8.25 |
| $\frac{3}{4}$ | 144 | 1.25 | 2 | 72 | 10.50 |
| $\frac{7}{8}$ | 144 | 2.20 | $2\frac{1}{4}$ | 72 | ..... |
| 1 | 144 | 2.40 | $2\frac{1}{2}$ | 72 | ..... |

Wrought Iron—Galvanized

| Size | Per C | Size | Per C |
|------------------------------------|--------|-----------------------------------|--------|
| 2 $\times 1\frac{1}{4}$ | \$4.80 | 3 $\times \frac{5}{16}$ | \$8.90 |
| $2\frac{1}{4} \times \frac{1}{4}$ | 5.80 | 2 $\times \frac{3}{8}$ | 9.35 |
| $2\frac{1}{2} \times \frac{1}{4}$ | 5.90 | $2\frac{1}{2} \times \frac{3}{8}$ | 11.10 |
| 2 $\times \frac{5}{16}$ | 6.70 | 3 $\times \frac{3}{8}$ | 12.60 |
| $2\frac{1}{2} \times \frac{5}{16}$ | 7.75 | ..... | ..... |

Cast Brass Polished

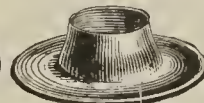
| Size | Per Gross | Size | Per Gross |
|---------------|------------|----------------|------------|
| $\frac{1}{2}$ | 144 \$2.50 | $1\frac{1}{4}$ | 144 \$8.00 |
| $\frac{5}{8}$ | 144 2.50 | $1\frac{1}{2}$ | 144 9.00 |
| $\frac{3}{4}$ | 144 3.00 | $1\frac{3}{4}$ | 72 12.00 |
| $\frac{7}{8}$ | 144 4.00 | 2 | 72 15.00 |
| 1 | 144 5.00 | ... | ... |

GROMMETS

WITH TEETH

No. 747

Made with sheet brass tube and top; inserted with Style C inserting die.



| Size Nos. | Diam. Hole When Inserted, Inch | Per Gross | Per Dozen | Size Nos. | Diam. Hole When Inserted, Inch | Per Gross | Per Dozen |
|-----------|--------------------------------|-----------|-----------|-----------|--------------------------------|-----------|-----------|
| 0 | $\frac{3}{16}$ | \$0.70 | \$0.07 | 3 | $\frac{7}{16}$ | \$1.30 | \$0.10 |
| 1 | $\frac{1}{4}$ | .75 | .08 | 4 | $\frac{9}{16}$ | 1.90 | .14 |
| 2 | $\frac{3}{8}$ | 1.10 | .09 | 5 | $\frac{5}{8}$ | 2.70 | .15 |

WITH CONICAL POINTS

No. 749

Heavy cast brass top; brass tube, rolled rim; inserted with Style B inserting die.

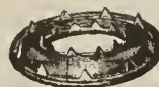


| Size Nos. | Diam. Hole When Inserted, Inch | Per Gross | Size Nos. | Diam. Hole When Inserted, Inches | Per Gross |
|-----------|--------------------------------|-----------|-----------|----------------------------------|-----------|
| 2 | $\frac{3}{8}$ | \$3.00 | 6 | $\frac{3}{4}$ | \$8.50 |
| 3 | $\frac{7}{16}$ | 3.70 | 7 | $\frac{7}{8}$ | 15.50 |
| 4 | $\frac{1}{2}$ | 4.90 | 8 | $1\frac{1}{16}$ | 18.50 |
| 5 | $\frac{5}{8}$ | 7.00 | .. | ..... | ..... |

Note: Rolled rim tubes only of any size will be furnished at one-half of the list for the grommets complete.

PATENT SPUR

Made with brass top and tube, rolled rim; inserted with die, Style B.



| Size Nos. | Diam. Hole When Inserted, Inch | Per Gross | Size Nos. | Diam. Hole When Inserted, Inches | Per Gross |
|-----------|--------------------------------|-----------|-----------|----------------------------------|-----------|
| 0 | $\frac{1}{4}$ | \$1.55 | 5 | $\frac{5}{8}$ | \$4.60 |
| 1 | $\frac{5}{16}$ | 1.75 | 6 | $\frac{3}{4}$ | 6.00 |
| 2 | $\frac{3}{8}$ | 1.95 | 7 | $\frac{7}{8}$ | 15.00 |
| 3 | $\frac{7}{16}$ | 2.60 | 8 | $1\frac{1}{16}$ | 17.50 |
| 4 | $\frac{1}{2}$ | 3.50 | .. | ..... | ..... |

GROMMET KNOBS

Made of cast brass; for use with No. 3 conical point grommets. Height of knob, $\frac{1}{8}$ inch.

Per Gross

No. 1 \$4.00



GROMMET HOOKS

For use with No. 3 or smaller grommets.

Material

| Material | Per Gross |
|-------------------|-----------|
| Wrought Pl. Brass | \$8.00 |
| Dipped Cast Brass | 5.00 |
| Pol. Cast Brass | 10.00 |



GROMMET INSERTING DIES

Made of cast steel; for inserting grommets. Use a wooden mallet for hammering.



Style A—Inserts Eyelet and Wilcox Patent Grommets

| Size Nos. | Each | Size Nos. | Each | Size Nos. | Each |
|-----------|--------|-----------|--------|-----------|--------|
| 1 | \$3.20 | 5 | \$4.00 | 9 | \$5.25 |
| 2 | 3.30 | 6 | 4.20 | 10 | 6.75 |
| 3 | 3.50 | 7 | 4.50 | 11 | 15.00 |
| 4 | 3.70 | 8 | 4.80 | 15 | 22.50 |

Style B—Inserts Patent Spur and Conical Point Grommets

| Size Nos. | Each | Size Nos. | Each | Size Nos. | Each |
|-----------|--------|-----------|--------|-----------|--------|
| 0 | \$3.00 | 3 | \$3.50 | 6 | \$4.20 |
| 1 | 3.20 | 4 | 3.70 | 7 | 4.50 |
| 2 | 3.30 | 5 | 4.00 | 8 | 4.80 |

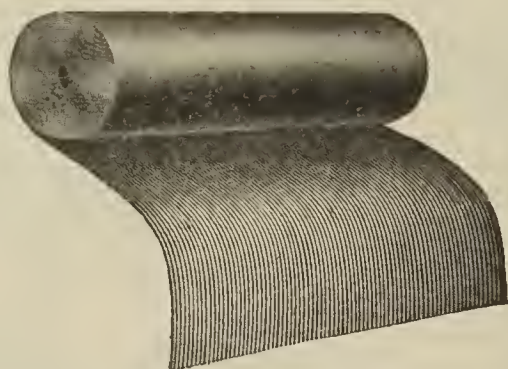
Style C—Inserts Sheet Brass Washer and Teeth Grommets

| Size Nos. | Each | Size Nos. | Each |
|-----------|--------|-----------|--------|
| 00 | \$5.50 | 2 | \$3.00 |
| 0 | 2.70 | 3 | 3.20 |
| 1 | 2.90 | 4 | 3.40 |

Midget—Cast Iron

| Size Nos. | Each | Size Nos. | Each |
|-----------|--------|-----------|--------|
| 0 | \$1.15 | 2 | \$1.80 |
| 1 | 1.30 | 3 | 2.0 |

RUBBER MATTING



CORRUGATED

Made with broad top corrugations, offering a wearing surface practically indestructible and especially easy to clean. Made up in rolls containing approximately 50 yards each.

| Thickness, Inch | Width, Inches | Weight per Sq. Yard. Lbs. | Per Sq. Yard |
|-----------------|--------------------|---------------------------|--------------|
| | Black | | |
| 1/8 | 24, 27, 30, 36, 48 | 9 | \$1.75 |
| | White | | |
| 1/8 | 36 | 13 | .... |

Prices on Application

STAIR NOSINGS



Made of wrought brass; for protecting edges of stair treads. Is 1 1/4 inches wide and 18 B and S gauge.

| Length, Inches | Weight Each, Ounces | Each |
|----------------|---------------------|--------|
| 18 | 5 1/4 | \$0.27 |
| 22 | 6 1/2 | .30 |
| 24 | 7 | .36 |
| 36 | 8 3/4 | .54 |

Prices on Application

Note: Can be furnished in larger sizes to order.

SAIL NEEDLES

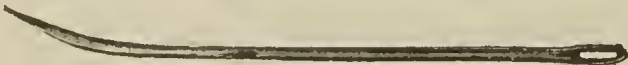


SMITHS LONG SQUARE

Made of high grade steel with ground point.

| Gauge Nos. | Length, Inches | Per Hundred |
|------------|----------------|-------------|
| 17 | 2 1/4 | \$1.80 |
| 15 | 2 1/2 | 2.25 |
| 14 | 2 3/4 | 2.35 |
| 13 | 3 | 2.65 |
| 12 | 3 1/4 | 3.55 |
| 11 | 3 1/2 | 4.80 |

PACKING OR SACK NEEDLES



Made of high grade steel; point is ground sharp and turned up.

| Gauge Nos. | Length, Inches | Per Gross | Gauge Nos. | Length, Inches | Per Gross |
|------------|----------------|-----------|------------|----------------|-----------|
| 14 | 3 | \$2.10 | 9 | 6 | \$6.45 |
| 13 | 3 1/2 | 2.45 | 8 | 6 1/2 | 8.70 |
| 12 | 4 | 3.30 | 7 | 7 | 10.50 |
| 11 | 4 1/2 | 3.90 | 6 | 8 | 13.95 |
| 10 | 5 | 4.80 | 5 | 9 | 18.90 |
| 10 | 5 1/2 | 5.25 | 4 | 10 | 26.70 |

PRESERVO



WATERPROOFING FOR CANVAS

A positive and popular weatherproofing; it waterproofs and preserves canvas, also prevents mildew; if directions are properly followed it has a covering capacity of about 90 square feet to a gallon; makes the material it is applied to very soft and pliable; will not freeze so as to get hard and crack in cold weather; furnished in black, brown, white, and buff.

| Buff, Brown | | | Colorless and White | | |
|-------------|------------------|--------|---------------------|------------------|--------|
| Size, Cans | Number to a Case | Each | Size, Cans | Number to a Case | Each |
| Gallon | 10 | \$1.80 | Gallon | 10 | \$1.85 |
| Quarts | 20 | .62 | Quarts | 20 | .64 |

WATERPROOF COATS

FISH BRAND MEDIUM

Clothing is made double throughout; the front opening is protected by a storm lap with brass clasps or fastenings. Made of the highest grade materials, especially those most vital to the waterproofing oils; each garment is coated five times, each application being thoroughly seasoned before next one is applied. Corduroy lined collar.

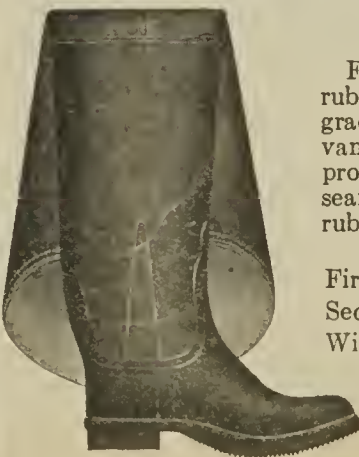
This long coat gives full protection and is a popular style with motorboat men, contractors, foremen and others whose occupation is largely out of doors.

Furnished in black.



| Size, Nos. | To Fit Breast Measure, Inches | Sleeve From Center of Back, Inches | Length, Inches | Each |
|------------|-------------------------------|------------------------------------|----------------|--------|
| 0 | 44 | 33 | 44 | \$4.20 |
| 1 | 42 | 32 | 44 | 4.20 |
| 2 | 40 | 31 | 44 | 4.20 |
| 3 | 38 | 30 | 44 | 4.20 |

RUBBER HIP BOOTS



First quality U. S. made hip rubber boots; made of the best grade of rubber gum and duck vamp; are snagproof and crack-proof; they have wide overlap seams, heavy corrugated double rubber soles and solid heels.

| | Per Pair |
|---------------------------|----------|
| First Quality | \$9.20 |
| Second Quality | 8.50 |
| With Sewed Leather Soles. | 10.80 |
| Twelve Pairs in a Case | |

SLICKERS

TOWER—FISH BRAND



Clothing is made double throughout; the front opening is protected by an inside storm lap with brass buttons for fastenings and Reflex edges, which prevent water from running in at the front by conducting it to the bottom. Two "Stayd-fast" pockets, patented, that will not rip; collar cloth lined and fitted with throat-piece, are other important features.

Made of the highest grade materials, especially those most vital such as waterproofing oils.

This long coat gives full protection and is a popular style with motorboat men, contractors, foremen and others whose occupations are largely out of doors.

Can be furnished in olive khaki, yellow and black; yellow is always furnished unless otherwise specified.

No. 121, Yellow; No. B121, Black; No. OK121, Olive Khaki

LONG COATS

| Size, Nos. | To Fit Breast Measure, Ins. | Sleeve From Center of Back, Inches | Length, Inches | Each |
|------------|-----------------------------|------------------------------------|----------------|--------|
| 0 | 44 | 33½ | 56 | \$4.20 |
| 1 | 42 | 32½ | 54 | 4.20 |
| 2 | 40 | 31½ | 52 | 4.20 |
| 3 | 38 | 30½ | 52 | 4.20 |

MEDIUM OR THREE-QUARTER COATS

No. 421 Yellow; No. B421 Black



Made exactly as Fish Brand Slickers, only it is a shorter pattern. Double throughout. Fitted with Inside Storm-lap and Reflex edges, cloth lined collar, inside storm-cuffs, and two "Staydfast" pockets.

| Size, Nos. | To Fit Breast Measure, Ins. | Sleeve From Center of Back, Inches | Length, Inches | Each |
|------------|-----------------------------|------------------------------------|----------------|--------|
| 0 | 44 | 33 | 44 | \$4.00 |
| 1 | 42 | 32 | 44 | 4.00 |
| 2 | 40 | 31 | 44 | 4.00 |
| 3 | 38 | 30 | 44 | 4.00 |

Oiled Clothing Measurements

Take breast measure snug over regular clothes or give size of the latter. The actual breast measure of our garments is much larger and allows for heavy undergarments.

WATERPROOF SUITS

TOWER—FISH BRAND

TWO-PIECE



This combination makes a very serviceable oiled suit for sailors, fishermen, teamsters and, in fact, all out of doors workers; the pants are similar in style to the ordinary overall; the coat being short or jacket style; the suit is made double throughout; the front opening is protected by a storm lap, with brass buttons for fasteners; made of the highest grade materials, especially those most vital — the waterproofing oils. These suits can be furnished either in two pieces, including pants and coat, or each garment can be purchased separately; furnished in yellow or black.

JACKETS

No. Y601 Yellow; No. B601 Black

| Size, Nos. | To Fit Breast Measure, Inches | Sleeve From Center of Back, Inches | Length, Inches | Each |
|------------|-------------------------------|------------------------------------|----------------|--------|
| 0 | 44 | 32½ | 31 | \$2.25 |
| 1 | 42 | 31½ | 30½ | 2.25 |
| 2 | 40 | 30½ | 30 | 2.25 |
| 3 | 38 | 30 | 30 | 2.25 |

STRING PANTS

No. Y901 Yellow; No. B901 Black

Like overalls, side openings fasten with brass buttons.

| Size, Nos. | Waist, Inches | Leg, Inches | Each | Size, Nos. | Waist, Inches | Leg, Inches | Each |
|------------|---------------|-------------|--------|------------|---------------|-------------|--------|
| 0 | 48 | 30 | \$2.25 | 2 | 44 | 29 | \$2.25 |
| 1 | 46 | 30 | 2.25 | 3 | 42 | 29 | 2.25 |

OVERALLS

No. Y801 Yellow; No. B801 Black

For all outdoor workers; made double throughout with side openings and brass button fasteners. Furnished in yellow or black as specified.

| Size, Nos. | Waist, Inches | Leg, Inches | Each |
|------------|---------------|-------------|--------|
| 0 | 48 | 30 | \$2.25 |
| 1 | 46 | 30 | 2.25 |
| 2 | 44 | 29 | 2.25 |
| 3 | 42 | 29 | 2.25 |



STORM HATS

TARP

No. Y11 Yellow; No. B11 Black



A popular medium priced hat second only to the Pilot in quality and protection; has a chin strap with ear laps which fastens on the side under the right ear, preventing loss of the hat in a

strong blow; furnished in yellow and black.

TARP Each \$0.60

Note—Sizes 6½ and 6¾ for boys can be furnished at same price.

STORM HATS

PILOT

No. Y4 Yellow; No. B4 Black

A very desirable and popular bad weather hat; the long brim keeps the neck dry and the lining is warm. Made of the best materials, especially the waterproofing which is applied one coat at a time with sufficient time for drying between applications. Each hat receives five applications of waterproofing. Furnished in yellow or black. Each Pilot\$0.90



NAVAL WORK HATS

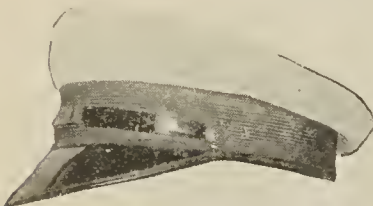
WHITE OR BLUE

Made of genuine white duck or blue denim; strongly sewed throughout; can be easily washed; regular navy style. Each Navy Hat\$1.15



YACHTING CAPS

NEW YORK YACHT CLUB STYLE



Made of blue broadcloth or with white duck top. Cut in strict accordance with the New York Yacht Club regulations. Has a patent leather visor with the under side of green to shade the eyes; patent leather chin strap with black anchor buttons. Furnished with a blue and a white removable cover. Each New York\$4.50

CAP EMBLEMS

GOLD BRAID

An emblem for yacht owners without club disc. Each No. 1\$2.00



Owner's Cap Ornament



Owner's Cap Ornament

This emblem is for yacht owners and has space for club disc. We can supply a disc for any club registered in Lloyd's.

Each No. 2—Emblem\$2.00 Disc90



Cap Ornament (Deck Department)

This emblem should be worn by a captain or mate of a yacht.

Each No. 3\$1.50



Cap Ornament (Engineer's Dept.)

Engineers cap emblem. Each No. 4\$1.50

LIFE PRESERVER SUITS



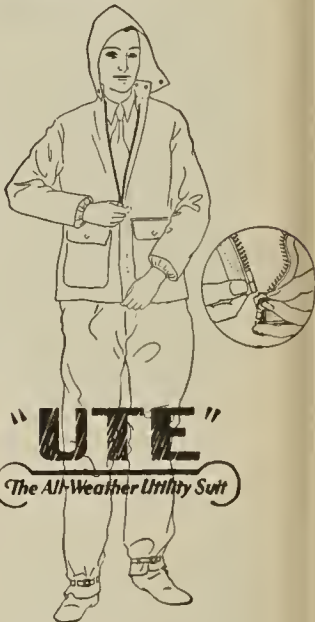
This is a combination Coverall and Life preserver suit. Made of pre-shrunk herringbone drill in white color, full cut one piece suit. Triple needle stitched throughout with bartacks to strengthen all ends of seams. Hookless TALON fastener all the way down front—no buttons to bother with. Two back pockets. Two compartments on each side in front and one compartment in back, holding KAPOK ENCLOSED in rubber tubes which are vulcanized. These tubes are removable and are held in by snap fasteners. The tubes can easily be removed for laundering. Sizes Very Small (16-18), Small (34-36), Medium (37-40), Large (42-44), Extra Large (44-46).

Per Suit Sizes 16 to 42 Inclusive\$15.00 Sizes 44 to 46 Inclusive 16.50

WEATHERPROOF SUITS

TWO-PIECE "UTE" SUITS

Same cloth and construction as one-piece suit except it consists of coat and pants. Coat is equipped with hookless talon fastener and is put on like an ordinary coat—not over the head. Two side pockets, detachable hood. Pants are roomy and full cut at crotch and may be worn with any type of footwear. Have straps at bottom, draw string at the waist, fly front and are fitted with side slit to get to inside clothes easily.



Made in Khaki Color only

Per Suit Sizes 34 to 42\$12.50 44 to 46 13.75

ONE-PIECE SUITS

One piece — waterproof — windproof—made of double texture cloth with rubber vulcanized in between. In khaki or white color. Made with famous Rustproof Hookless TALON Fasteners all the way down the front. Extra seat in trousers—straps at legs for tightening. Elastic concealed waistband. One breast pocket and one side pocket with welt for reaching inside to other clothes. Extra reinforcement at crotch and fly-protecting front. Elastic wristbands. Detachable hood. Every seam cemented and strapped. Light weight. Comes in Small (34 to 36), Medium (37 to 40), Large (42 to 44), Extra Large (42 to 46).



Per Suit Khaki, White, Sizes 34 to 42\$12.50\$16.50 44 to 46 13.75 17.15

OYSTER TONG RIVET SETS



REGULAR—WITH RIVETS

Made of cast brass, plain finish consisting of four rectangular plates, with rivets and burrs. For use on all standard makes of clam or oyster tongs.

Set consists of four plates, one rivet and one washer.

| Description | Weight per Dozen, Lbs. | Per Set |
|-----------------------|------------------------|---------|
| Complete Set | 4 1/2 | \$0.60 |
| Rivets and Burrs Only | 1 1/2 | .35 |
| *Sets of Plates Only | 3 | .35 |

*Set contains four plates.

BRIDDELLS IMPROVED

Made of brass and of an improved design; has an extra wearing surface insuring long wear. Furnished in sets only, consisting of one rivet, one washer and four plates.

Improved—Weight per Set, Lb.....\$0.35

EEL SPEARS

WINTER

Wrought steel throughout. Forged socket; spring prongs. Made with 4, 6, 8, 10, 12 and 14 prongs. Prongs are wedged in position and can be readily removed for repairing or straightening. Well made; gloss black finished.



| No. of Prongs | Width Inches | Weight Each, Lbs. | Length Overall, Inches | Per Dozen |
|---------------|--------------|-------------------|------------------------|-----------|
| 6 | 7 3/4 | 1 1/2 | 17 | \$37.75 |
| 8 | 9 3/8 | 1 3/4 | 17 1/2 | 42.80 |
| 10 | 11 | 2 1/8 | 17 1/2 | 48.00 |
| 12 | 11 1/2 | 2 1/2 | 17 1/2 | 55.25 |

NEW STYLE SUMMER

Wrought steel; forged socket. Hand made, barbed prongs. Gloss black finished. Made with seven, nine or eleven prongs.

| No. of Prongs | Width, Inches | Weight Each, Lbs. | Length, Inches | Per Dozen |
|---------------|---------------|-------------------|----------------|-----------|
| 7 | 4 1/8 | 1 1/4 | 15 | \$31.50 |
| 9 | 5 1/2 | 1 1/2 | 15 | 36.50 |
| 11 | 7 | 1 3/4 | 15 1/2 | 41.00 |

Note—These spears have sharp prongs and barb nicks the length of each prong.



OLD STYLE SUMMER

Wrought steel throughout; forged socket; spring prongs. Gloss black finished. Made with five or seven prongs.

| No. of Prongs | Width, Inches | Weight Each, Lbs. | Length O. A., Ins. | Per Dozen |
|---------------|---------------|-------------------|--------------------|-----------|
| 5 | 5 3/8 | 1 3/8 | 15 | \$38.50 |
| 7 | 8 1/4 | 1 3/4 | 15 1/2 | 40.50 |

CLAM RAKES

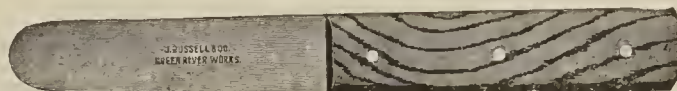
EAGLE CLAW

Forged steel throughout; welded socket; spring prongs. Made in 9, 11, 13 and 15 prongs. Gloss black finished.



| No. of Prongs | Width, Inches | Weight Each, Lbs. | Length Overall, Inches | Per Dozen |
|---------------|---------------|-------------------|------------------------|-----------|
| 9 | 6 3/4 | 2 1/4 | 15 | \$30.50 |
| 11 | 8 1/4 | 2 1/2 | 15 | 36.50 |
| 13 | 10 | 2 3/4 | 15 | 40.25 |
| 15 | 10 3/4 | 3 1/2 | 15 1/2 | 46.25 |

CLAM KNIVES



Forged, polished crucible steel blade, tang full length through handle, three rivets. Length of blade, 3 3/8 inches; length overall, 7 1/2 inches.

| Nos. | Handles | Weight per Dozen, Lbs. | Per Dozen |
|------|----------|------------------------|-----------|
| 2012 | Beech | 1 3/4 | \$4.35 |
| 5012 | Cocobolo | 2 | 5.00 |

Twelve in a Box

OYSTER KNIVES

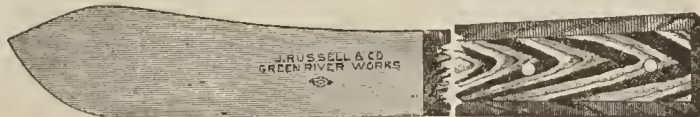


Forged, polished crucible steel blade, tang securely fastened in handle; brass ferrule bolster. Length of straight blade, 2 3/8 inches; length overall, 6 3/4 inches.

| No. | Points | Weight per Dozen, Lbs. | Per Dozen |
|-----|----------|------------------------|-----------|
| 23 | Straight | 1 1/2 | \$5.75 |

Twelve in a Box

SHEATH KNIVES

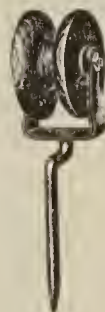


Forged steel blade, hardened and tempered; beechwood handle firmly riveted blade.

Per Dozen

No. 2212—Length Blade, 4 1/2 Inches; Weight per Dozen, 2 5/8 Lbs.\$5.00

TRAWL ROLLERS



Lignum-vitae wheel with wrought iron, galvanized straps.

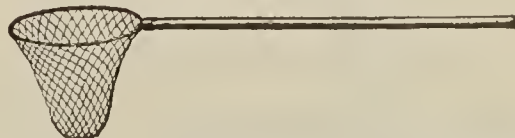
No. 20—Without Bushing.

No. 21—Common bushed sheave.

No. 22—Patent bushed sheave.

| Nos. | Diameter of Sheave, Inches | Weight Each, Lbs. | Each |
|------|----------------------------|-------------------|--------|
| 20 | 5 1/4 x 3 | 3 1/4 | \$1.70 |
| 21 | 5 1/4 x 3 | 3 3/4 | 2.25 |
| 22 | 5 1/4 x 3 | 4 1/2 | 3.40 |

CRAB NETS



Handle made of a good grade of ash, welded galvanized iron hoop and galvanized ferrule, net made of 12 thread soft laid seine twine.

| Size | Diameter Hoop, Inches | Length of Net, Inches | Length Handle, Feet | Per Dozen |
|-------------|-----------------------|-----------------------|---------------------|-----------|
| Regular | 12 | 16 | 5 1/2 to 6 | \$5.35 |
| Heavy | 13 | 16 | 5 1/2 to 6 | 10.65 |
| Extra Hoops | | | | 3.35 |
| Extra Nets | | | | 2.65 |

SHRIMP NETS

Diameter hoop, 12 inches; length net, 16 inches; length of handle, 5 1/2 to 6 feet; weight per dozen, 29 pounds.

| | Per Dozen |
|------------|-----------|
| Complete | \$12.35 |
| Extra Nets | 6.65 |

FISH AND OYSTER BASKETS

DAISY



Made of No. 12 galvanized wire, not galvanized after being made, therefore there are no rough or protruding ends of wire so injurious to the hands or clothing.

Two and three peck sizes made with one center hoop, and wires spaced approximately five-eighths of an inch apart. They are well

adapted for picking clams, and handling oysters in the shell, also many other purposes connected with the fishing industry.

Two peck baskets are furnished with regular bail (No. 2-XB), or with regular side handles (No. 2-XH), as ordered.

The four peck and larger baskets are made with two center hoops. The wires are spaced approximately five-eighths of an inch apart. They are well adapted for general use in handling fish and oysters on the boats or in the houses. These baskets are furnished with regular handles unless otherwise ordered.

| Nos. | Approximate Capacity, Pecks | Top Diameter, Inches | Bottom Diameter, Inches | Height, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------|-----------------------------|----------------------|-------------------------|----------------|------------------------|-----------|
| 2-XB | 2 | 15 | 10 | 10 | 55 | \$21.50 |
| 2-XH | 2 | 15 | 10 | 10 | 55 | 21.50 |
| 3-X Std. | 3 | 17 | 11 | 11 | 60 | 25.00 |
| 3-X Bal. | 3 | 18 | 10½ | 11 | 60 | 25.00 |
| 4-X | 4 | 18 | 12 | 12 | 75 | 30.00 |
| 5-X | 5 | 18½ | 13½ | 12 | 80 | 35.00 |
| 6-X | 6 | 20½ | 14 | 12 | 90 | 40.00 |

**Six in a Bundle, Nested
EXTRA STRONG—XX WEAVE**

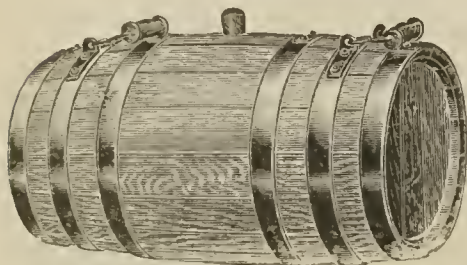
This line of baskets is designed to meet the demand for a closer woven and stronger basket than the regular fish and oyster baskets. Made of No. 12 galvanized wire spaced approximately one-half inch apart, and having more wires, makes them very strong and rigid.



| Nos. | Approximate Capacity, Pecks | Top Diameter, Inches | Bottom Diameter, Inches | Height, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|-----------------------------|----------------------|-------------------------|----------------|------------------------|-----------|
| 3-XX | 3 | 16¾ | 11¼ | 11 | 70 | \$30.00 |
| 4-XX | 4 | 18 | 12¼ | 12 | 85 | 36.00 |
| 5-XX | 5 | 18½ | 13 | 12 | 95 | 42.00 |
| 6-XX | 6 | 20 | 14 | 12 | 100 | 50.00 |
| 7-XX | 7 | 22½ | 16 | 12 | 120 | 60.00 |
| 8-XX | 8 | 22½ | 16 | 14 | 130 | 68.00 |
| 0-XX | 10 | 25½ | 19 | 15 | 150 | 84.00 |

WATER BREAKERS

OAK



Used in life boats for carrying the drinking water. Made of oak throughout with galvanized steel hoops.

Not regularly furnished with handles; if so ordered there will be an additional net charge of \$0.50.

| Nos. | Capacity, Gallons | Weight Each, Lbs. | Each | Nos. | Capacity, Gallons | Weight Each, Lbs. | Each |
|------|-------------------|-------------------|--------|------|-------------------|-------------------|---------|
| 5792 | 3 | 8 | \$7.05 | 5796 | 15 | 25 | \$15.40 |
| 5793 | 5 | 12 | 10.50 | 5797 | 20 | 35 | 22.00 |
| 5795 | 10 | 20 | 12.95 | | | | |

Note: Made to order with brass hoops and handle, prices upon application.

MOTOR COVERS

FOR OUTBOARD MOTORS



Made from 12 oz. army duck water-proofed. Sufficiently large enough to put on without the usual effort.

| | Each |
|--------------|--------|
| Small | \$3.00 |
| Medium | 3.50 |
| Large | 4.00 |

Specify make and model of motor when ordering.

MARLINE SPIKES

FOR MANILA ROPE

Made of solid steel; polished; countersunk eye near head.

| Length, inches | Diameter at Head, inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|--------------------------|------------------------|-----------|
| 6 | 1¼ | 5¾ | \$8.00 |
| 8 | ¾ | 8 | 9.25 |
| 10 | 7/8 | 12½ | 10.50 |
| 12 | 1 1/16 | 21¾ | 12.00 |
| 14 | 1 1/8 | 26 | 16.00 |
| 16 | 1¼ | 40½ | 19.50 |
| 18 | 1½ | 40½ | 23.50 |



FOR WIRE ROPE
Solid cast steel, forged from the bar; full polished.

| Length, inches | Diameter of Head, inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|--------------------------|------------------------|-----------|
| 8 | 1¼ | 6¾ | \$20.50 |
| 12 | 1 3/8 | 15 | 32.00 |
| 14 | 1 3/8 | 20 | 37.00 |
| 16 | 1½ | 27 | 43.00 |
| 18 | 1½ | 31¼ | 49.00 |

BREAD BREAKERS

For life boats; complies with the new law.

Made of heavy galvanized iron with side handles and fitted with a five-inch opening protected with a heavy cast brass screw and cap, machine threaded with space for a pliable rubber gasket to insure a tight fit.

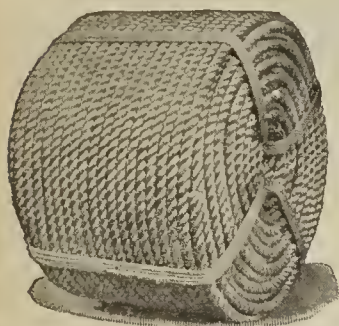
Holds twenty-five pounds of hard bread (thirty rations) equaling fifteen pounds of Powell's U. S. Army emergency rations.

| | Each |
|--|--------|
| No. 5799—Size 12x12x18 Inches High; Weight Each, 12½ Lbs. | \$5.00 |
| No. 5800—Cover Only | 2.50 |



Fishermen's Requirements of All Kinds

MANILA ROPE



Universally employed for marine purposes and contractors use, and in all cases where life and property may be at stake.

Regular lay, three strand is intended for general all-round use. Each strand contains from two up to several hundred yarns, according to the size of rope; as three strands are laid together to form the rope, the total number of yarns is always a

product of three. Smaller sizes up to about 1/2 inch diameter are often spoken of as 6-thread, 12-thread, 21-thread, etc. It is a medium twist, firm enough to keep its shape and withstand ordinary pressure, but with the lay adjusted to permit easy handling, splicing, etc.

Net Prices for Cut Lengths

| Diam. Inch | Per Foot | Diameter, Inch | Per Foot |
|------------|----------|----------------|------------|
| 1/4 | \$0.01 | 3/4 | \$0.05 1/2 |
| 5/16 | .01 1/2 | 7/8 | .07 1/2 |
| 3/8 | .02 | 1 | .10 |
| 1/2 | .03 | 1 1/4 | .14 |
| 5/8 | .04 1/2 | 1 1/2 | .20 |

CORDAGE BASIS

A basis price per pound will be quoted to which must be added the following differentials:

| Rope Diameter | Per Lb. Above Basis |
|--|---------------------|
| 3/4-Inch (2 1/4-Inch Circum.) and Larger..... | Basis |
| 5/8-Inch (2-Inch Circum.) 33 Thread..... | \$0.01 |
| 7/8, 1/2 and 7/8-Inch..... | .02 |
| 3/8-Inch (12-Thread) | .04 |
| 1/4 and 7/8-Inch (6-Thread and 9-Thread). | .05 |
| 7/8-Inch (6-Thread, Fine)..... | .06 |

MANILA SPECIALTIES (NET ROPE)

| | |
|--|--------|
| 15-Thread and Larger..... | \$0.02 |
| 12-Thread | .03 |
| 6 and 9-Thread | .04 |
| Manila Bolt Rope, 4-Strand, Soft Laid..... | .05 |

MANILA BOLT ROPE—4-STRAND—SOFT LAID

Four-strand rope weighs from 5 to 7 per cent heavier than three-strand plain laid rope.

Four-strand rope, 1 cent per pound extra.

All rope oiled, 1 cent per pound extra.

All rope in balls, 1/2 cent extra.

WEIGHT, LENGTH AND STRENGTH OF ALL MANILA ROPE

| Size | | Lengths | | Weights | | Strengths | |
|---------------|-----------------------|---------|--------------------|-----------------|--------------------|-------------------------|-----------------------|
| Diam., Inches | Circumference, Inches | In Feet | In Full Coil, Feet | Full Coil, Lbs. | Per 100 Feet, Lbs. | Breaking Strength, Lbs. | Working Strains, Lbs. |
| 3/8 | 5/8 | 70. | 1,750 | 25 | 1.33 | 500 | 100 |
| 1/4 | 3/4 | 58. | 1,750 | 30 | 1.67 | 725 | 150 |
| 5/16 | 1 | 38. | 1,700 | 45 | 2.50 | 1,225 | 250 |
| 3/8 | 1 1/8 | 27. | 1,625 | 60 | 3.45 | 1,500 | 300 |
| 7/16 | 1 1/4 | 19. | 1,425 | 75 | 4.76 | 1,800 | 350 |
| 1/2 | 1 1/2 | 14.5 | 1,200 | 85 | 6.90 | 2,500 | 500 |
| 5/8 | 1 3/4 | 10.25 | 1,200 | 120 | 9.75 | 3,250 | 650 |
| 3/4 | 2 | 8.22 | 1,200 | 150 | 12.20 | 4,200 | 850 |
| 7/8 | 2 1/4 | 6.48 | 1,200 | 190 | 15.40 | 5,200 | 1,050 |
| 1 | 2 1/2 | 5.36 | 1,200 | 230 | 18.70 | 6,400 | 1,300 |
| 1 1/8 | 2 3/4 | 4.56 | 1,200 | 270 | 21.90 | 7,700 | 1,550 |
| 1 1/4 | 3 | 3.85 | 1,200 | 320 | 26.00 | 9,000 | 1,800 |
| 1 1/2 | 3 1/4 | 3.28 | 1,200 | 375 | 30.50 | 10,200 | 2,100 |
| 1 3/8 | 3 1/2 | 2.86 | 1,200 | 430 | 34.90 | 11,700 | 2,400 |
| 1 1/2 | 3 3/4 | 2.46 | 1,200 | 500 | 40.6 | 13,200 | 2,700 |
| 1 5/8 | 4 | 2.16 | 1,200 | 570 | 46.3 | 15,000 | 3,000 |
| 1 3/4 | 4 1/2 | 1.72 | 1,200 | 715 | 58.1 | 18,300 | 3,700 |
| 1 7/8 | 5 | 1.39 | 1,200 | 885 | 71.9 | 22,300 | 4,500 |
| 2 | 5 1/2 | 1.15 | 1,200 | 1,065 | 86.5 | 26,400 | 5,300 |
| 2 1/8 | 6 | .965 | 1,200 | 1,275 | 103.6 | 31,000 | 6,200 |
| 2 1/4 | 6 1/2 | .821 | 1,200 | 1,500 | 121.9 | 35,500 | 7,100 |

Working strains are figured at about 20 per cent of breaking strength. The tare on this all-manila rope averages 1 1/2 per cent and the gross weight for full coils include an average over-length allowance of 1 per cent.

YACHT MARLINE

TARRED



Used like spunyarn, for seizing, whipping and filling work—especially the finer class of this work—is also used as a covering for the strands of a certain class of wire rope.

A corded product, consisting of threads, which are first given an extra amount of twist, and then put together with an opposite twist. Made of selected hemp and furnished in three classes in one-pound balls.

| Description | Per Pound |
|--|--------------------|
| Extra Fine Yacht "Aqua" (6 1/2 Lb. Ball in box) | .75 |
| Medium Yacht | .75 |
| Coarse Yacht | .60 |
| Italian Marline | 1/2-Lb. Balls 1.00 |

WHITE YACHT MARLINE

A two-ply extra fine, laid yarns of the finest manila hemp. Furnished tarred or untarred, generally untarred in one-pound balls.

| Description | Per Pound |
|--------------------------|-----------|
| White Yacht Marline..... | \$0.95 |

COTTON SAIL TWINE

A very satisfactory sail twine from standpoint of uniformity, length and strength. Furnished in medium in 1/2-pound balls.

| Description | Per Ball 1/2 Pound |
|--------------|--------------------|
| Medium | \$0.45 |



COTTON ROPE



Universally used for marine purposes chiefly as guard rails on dingys for fine yachts and cruisers and to make bumpers for all types of boats. Made of best selected cotton hemp, hard laid, three ply. Furnished coiled on hard cardboard cones in the smaller sizes and in regular coils in the larger sizes.

| Diam., Inches | Circumference, Inches | Feet in 1 Lb. | Length Full Coil, Feet | Per Foot | Per Pound |
|---------------|-----------------------|---------------|------------------------|----------|-----------|
| 1/8 | 3/8 | 250 | 2500 | .... | .... |
| 5/32 | 9/32 | 110 | 1100 | .... | .... |
| 3/16 | 1/2 | 85 | 2500 | .... | .... |
| 1/4 | 5/8 | 75 | 2200 | .... | .... |
| 5/16 | 3/4 | 55 | 1600 | \$0.02 | \$0.70 |
| 3/8 | 1 | 35 | 1200 | .03 | .70 |
| 1/2 | 1 1/8 | 25 | 1000 | .05 | .70 |
| 5/8 | 1 1/2 | 15 | 750 | .06 | .70 |
| 3/4 | 2 | 10 | 400 | .08 | .70 |
| 7/8 | 2 1/4 | 7 | 600-1200 | .20 | .85 |
| 1 | 2 3/4 | 5 1/2 | 600-1200 | .... | .85 |
| 1 1/8 | 3 | 4 1/2 | 600-1200 | .30 | .85 |
| 1 1/4 | 3 1/2 | 3 1/2 | 600-1200 | .... | .85 |
| 1 1/2 | 3 3/4 | 3 1/4 | 600-1200 | .60 | .85 |
| 1 3/4 | 4 | 2 | 600-1200 | .... | .85 |
| 2 | 4 1/2 | 1 | 600-1200 | .... | .85 |

FLAG HALYARDS

COTTON BRAIDED

Solid braided white cotton, high grade soft laid, put up in hanks of 100 feet each.

| Nos. | Diam., Inch | Circumference, Inches | Per Pound | Nos. | Diam., Inch | Circumference, Inches | Per Pound |
|------|-------------|-----------------------|-----------|------|-------------|-----------------------|-----------|
| 5 | 1/2 | — | \$0.60 | 9 | 1/2 | 7/8 | \$0.60 |
| 6 | 3/16 | 1/2 | .60 | 10 | 5/16 | 1 | .60 |
| 7 | 1/4 | 5/8 | .60 | 12 | 3/8 | 1 1/8 | .60 |

BRAIDED LINES

COTTON



Braided white cotton lines; used for tying down yacht and boat covers, sail covers, etc. Furnished in 48 foot hanks.

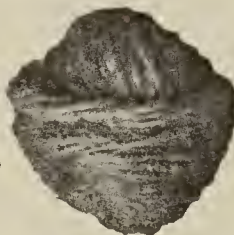
| Nos. | Diam., Inch | Circum., Inch | Per Dozen, Hanks |
|-------|----------------|----------------|------------------|
| 4 | $\frac{1}{8}$ | $\frac{3}{8}$ | \$6.00 |
| 4 1/2 | $\frac{5}{32}$ | $\frac{3}{20}$ | 7.20 |

COTTON LAMP WICK

Furnished in 2 and 16 ounce balls.

Size Ball,
Ounces
2

Each
\$0.15



CAULKING COTTON



Made from cotton strippings and carded cotton; contains no sharp fibres.

| Size, Lbs. | Package | Regular, Lb. | Extra, Lb. |
|------------|---------|--------------|------------|
| 1 | Bale | \$0.20 | \$0.30 |
| 50 | Bale | .... | .... |
| 100 | Bale | .... | .... |

OAKUM



Made of the best grade hemp (canabis sativa), line or tow; spun by machine into slivers or threads in the form of balls or hanks of five pounds each; soft and uniform in texture; strong and sufficient twisted to be suitable in all respects for calking seams of vessels. The fibres are thoroughly impregnated with pine tar not in excess of 30 per cent of the total weight of the fibre and tar.

| Nos. | Per Pound | |
|---------|-----------|--------|
| | Spun | Unspun |
| 1 | \$.... | \$.... |
| 3 | | |
| Plumber | | |

Prices Upon Application

RAW HIDE & TANNED LEATHER



Both rawhide and leather contain about 20 sq. ft. to the side. Used for rigging and oars.

| Raw Hide | Per Square Foot |
|---|-----------------|
| | \$.... |
| Tanned leather | Per Lb. |
| $\frac{1}{8}$ " $\frac{1}{8}$ " $\frac{3}{8}$ " Thick | \$1.60 |

GALVANIZED RIGGING ROPE
IRON

For guys and boom shifters. Six strands, seven

wires in each strand; one hemp center.

Bronze on Order

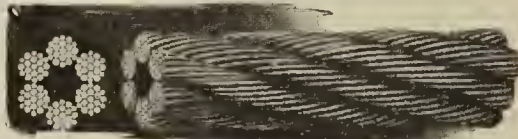
| Diam., Inches | Circumference, Inches | Approx. Weight per Foot, Lbs. | Approx. Strength in Tons | Per Foot |
|----------------|-----------------------|-------------------------------|--------------------------|----------|
| $\frac{1}{16}$ | $\frac{1}{2}$ | .04 | .61 | \$0.03 |
| $\frac{1}{8}$ | $\frac{5}{8}$ | .063 | .79 | .04 |
| $\frac{1}{4}$ | $\frac{3}{4}$ | .09 | .99 | .04 1/2 |
| $\frac{3}{8}$ | $\frac{7}{8}$ | .125 | 1.20 | .05 |
| $\frac{1}{2}$ | 1 | .15 | 1.42 | .05 |
| $\frac{5}{8}$ | $1\frac{1}{8}$ | .22 | 1.95 | .07 |
| $\frac{3}{4}$ | $1\frac{1}{4}$ | .30 | 2.35 | .08 |
| $\frac{7}{8}$ | $1\frac{1}{2}$ | .39 | 3.39 | .10 |
| 1 | $1\frac{3}{4}$ | .50 | 4.46 | .13 |
| $1\frac{1}{8}$ | 2 | .62 | 5.7 | .14 |
| $1\frac{1}{4}$ | $2\frac{1}{4}$ | .89 | 7.8 | .18 |
| $1\frac{3}{8}$ | $2\frac{1}{2}$ | 1.03 | 9.4 | .22 |
| $1\frac{1}{2}$ | $2\frac{3}{4}$ | 1.20 | 11.1 | .26 |
| $1\frac{5}{8}$ | 3 | 1.58 | 14.1 | .30 |
| $1\frac{3}{4}$ | $3\frac{1}{4}$ | 1.77 | 16.1 | .35 |
| $1\frac{7}{8}$ | $3\frac{1}{2}$ | 2. | 18. | .40 |
| 2 | $3\frac{3}{4}$ | 2.21 | 19. | .45 |
| $2\frac{1}{8}$ | 4 | 2.45 | 23. | .50 |
| $2\frac{1}{4}$ | $4\frac{1}{4}$ | 3. | 26. | .57 |
| $2\frac{3}{8}$ | $4\frac{1}{2}$ | 3.24 | 28. | .63 |
| $2\frac{1}{2}$ | $4\frac{3}{4}$ | 3.55 | 30. | .71 |
| $2\frac{5}{8}$ | 5 | 4.15 | 35. | .78 |
| $2\frac{3}{4}$ | $5\frac{1}{4}$ | 4.42 | 38. | .83 |
| $2\frac{7}{8}$ | $5\frac{1}{2}$ | 4.85 | 42. | .89 |

WIRE HOISTING ROPE

PLOW STEEL

Six Strands

Nineteen wires to the strand; one hemp center. Plain.



| Diam. Inches | Circumference, Inches | Weight Per Foot Lbs. | Strength of 2000 Lbs. | Working Load Tons of 2000 Lbs. | Dia. Drum or Sheave Advised, Feet | Per Foot |
|----------------|-----------------------|----------------------|-----------------------|--------------------------------|-----------------------------------|------------|
| $\frac{1}{4}$ | $\frac{3}{4}$ | .10 | 2.65 | .53 | 1 | \$0.11 1/2 |
| $\frac{5}{16}$ | 1 | .15 | 3.8 | .76 | 1.25 | .12 |
| $\frac{3}{8}$ | $1\frac{1}{8}$ | .22 | 5.75 | 1.15 | 1.50 | .12 |
| $\frac{7}{8}$ | $1\frac{1}{4}$ | .30 | 8 | 1.6 | 1.75 | .13 |
| $\frac{1}{2}$ | $1\frac{1}{2}$ | .39 | 10 | 2 | 2 | .15 |
| $\frac{5}{8}$ | $1\frac{3}{4}$ | .50 | 12.3 | 2.4 | 2.25 | .17 |
| $\frac{3}{4}$ | 2 | .62 | 15.5 | 3.1 | 2.5 | .20 |
| $\frac{7}{8}$ | $2\frac{1}{4}$ | .89 | 23 | 4.6 | 3 | .27 |
| 1 | $2\frac{3}{4}$ | 1.20 | 29 | 5.8 | 3.5 | .33 |
| $1\frac{1}{8}$ | 3 | 1.58 | 38 | 7.6 | 4 | .40 |
| $1\frac{1}{4}$ | $3\frac{1}{2}$ | 2 | 47 | 9.54 | 4.5 | .51 |
| $1\frac{3}{8}$ | 4 | 2.45 | 58 | 12 | 5 | .61 |
| $1\frac{1}{2}$ | $4\frac{1}{4}$ | 3 | 72 | 14 | 5.5 | .75 |
| $1\frac{5}{8}$ | $4\frac{3}{4}$ | 3.55 | 82 | 16 | 6 | .88 |
| $1\frac{3}{4}$ | 5 | 4.15 | 94 | 19 | 6.5 | 1.03 |
| $1\frac{7}{8}$ | $5\frac{1}{2}$ | 4.85 | 112 | 22 | 7 | 1.24 |
| 2 | $5\frac{3}{4}$ | 5.55 | 127 | 25 | 8 | 1.39 |
| $2\frac{1}{8}$ | $6\frac{1}{4}$ | 6.3 | 140 | 28 | 8 | 1.50 |
| $2\frac{1}{4}$ | $7\frac{1}{8}$ | 8 | 186 | 37 | 9 | 1.90 |
| $2\frac{3}{8}$ | $7\frac{3}{8}$ | 9.85 | 229 | 46 | 10 | 2.38 |
| $2\frac{1}{2}$ | $8\frac{1}{8}$ | 11.95 | 275 | 55 | 11 | 2.85 |

For Wire Center Add 10 Per Cent

SEIZING WIRE

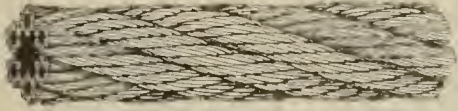
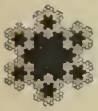


GALVANIZED

Seven strands of steel wire twisted into a single strand.

| Diam. Inch | Wire Ga., Nos. | Weight per 1000 Ft., Lbs. | Per Pound | Diam. Inch | Wire Ga., Nos. | Weight per 1000 Ft., Lbs. | Per Pound |
|-----------------|----------------|---------------------------|-----------|----------------|----------------|---------------------------|-----------|
| $\frac{9}{64}$ | 18 | 50 | \$0.32 | $\frac{1}{8}$ | 20 | 30 | \$0.36 |
| $\frac{11}{64}$ | 19 | 37 | .34 | $\frac{3}{32}$ | 21 | 25 | .37 |

TILLER ROPES



A very flexible bronze wire cable of 6 wires, 7 strands—6 ropes to each cable—250 and 500 ft. reels.

| Diam., Inches | Approximate Weight per Foot, Lbs. | Per Foot | Diam., Inches | Approximate Weight per Foot, Lbs. | Per Foot |
|----------------|-----------------------------------|----------|---------------|-----------------------------------|----------|
| $\frac{1}{8}$ | .02 | \$0.08 | $\frac{3}{8}$ | .16 | \$0.33 |
| $\frac{3}{16}$ | .056 | .18 | $\frac{1}{2}$ | .28 | .53 |
| $\frac{1}{4}$ | .07 | .20 | $\frac{5}{8}$ | .43 | .70 |
| $\frac{5}{16}$ | .11 | .24 | .. | ... | .... |

GALVANIZED—FLEXIBLE

| Diam., Inches | Approximate Weight per Foot, Lbs. | Per Foot | Diam., Inches | Approximate Weight per Foot, Lbs. | Per Foot |
|----------------|-----------------------------------|----------|----------------|-----------------------------------|----------|
| $\frac{1}{8}$ | .035 | \$0.04 | $\frac{3}{8}$ | .16 | \$0.15 |
| $\frac{3}{16}$ | .056 | .12 | $\frac{7}{16}$ | .21 | .18 |
| $\frac{1}{4}$ | .07 | .13 | $\frac{1}{2}$ | .28 | .19 |
| $\frac{5}{16}$ | .11 | .14 | .. | ... | .... |

COVERED WIRE—BRONZE CENTER

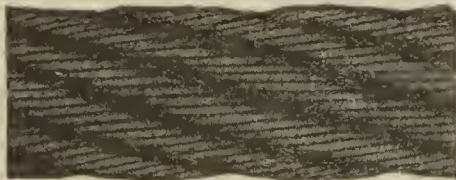
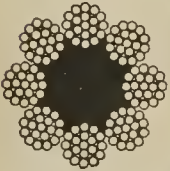


Used for steering gears of boats and for other purposes where extreme flexibility is necessary.

| Diam., Inches | Approximate Weight per Foot, Lbs. | Per Foot | Diam., Inches | Approximate Weight per Foot, Lbs. | Per Foot |
|----------------|-----------------------------------|----------|----------------|-----------------------------------|----------|
| $\frac{3}{16}$ | .32 | \$0.05 | $\frac{5}{16}$ | .54 | \$0.08 |
| $\frac{1}{4}$ | .37 | .08 | $\frac{3}{8}$ | .74 | 11 |

250 and 500 Reels

CAST STEEL WIRE ROPE



For use in yacht rigging and as guy rope; good for all ordinary work, as it is of moderately high tensile strength and is quite flexible; has six strands, with seven or nineteen wires; hemp center. Galvanized.

| Diam., Inches | Circumference, Inches | Approximate Breaking Strength in Tons, 2,000 Lbs. | Approximate Weight per Foot, Lbs. | Per Foot | 19 Wires | 7 Wires |
|-----------------|-----------------------|---|-----------------------------------|----------|----------|---------|
| $\frac{5}{16}$ | 1 | 3.2 | .15 | \$0.14 | \$0.06 | |
| $\frac{3}{8}$ | $1\frac{1}{8}$ | 4.2 | .22 | .14 | .08 | |
| $\frac{7}{16}$ | $1\frac{1}{4}$ | .5 | .30 | .15 | .09 | |
| $\frac{15}{16}$ | $1\frac{3}{8}$ | .6 | .34 | .16 | .10 | |
| $\frac{1}{2}$ | $1\frac{1}{2}$ | .7 | .39 | .16 | .12 | |
| $\frac{9}{16}$ | $1\frac{3}{4}$ | .9 | .50 | .18 | .14 | |
| $\frac{5}{8}$ | 2 | 11.7 | .62 | .20 | .18 | |
| $\frac{3}{4}$ | $2\frac{1}{4}$ | 16.8 | .89 | .28 | .26 | |
| $\frac{13}{16}$ | $2\frac{1}{2}$ | 19 | 1.03 | .32 | .30 | |
| $\frac{7}{8}$ | $2\frac{3}{4}$ | 22 | 1.20 | .35 | .34 | |
| 1 | 3 | 28 | 1.58 | .46 | .42 | |
| $1\frac{1}{16}$ | $3\frac{1}{4}$ | 31 | 1.77 | .52 | .48 | |
| $1\frac{1}{8}$ | $3\frac{1}{2}$ | 34 | 2 | .56 | .54 | |
| $1\frac{3}{16}$ | $3\frac{3}{4}$ | 38 | 2.21 | .62 | .60 | |
| $1\frac{1}{4}$ | 4 | 42 | 2.45 | .68 | .64 | |

RIGGERS' SCREWS

FOR WIRE ROPE

Made of wrought iron; screw has full cut threads and threaded full length; bottom jaw is hinged and held by spring cotter; used for holding rope while being spliced on rings, etc.



| Nos. | For Rope Diam., Inches | Diameter of Screw, Inches | Each |
|------|------------------------|---------------------------|---------|
| 0 | $2\frac{1}{4}$ | $1\frac{1}{2}$ | \$12.50 |
| 1 | 2 | $1\frac{1}{4}$ | 11.00 |
| 2 | $1\frac{3}{4}$ | $1\frac{1}{8}$ | 9.00 |
| 3 | $1\frac{1}{2}$ | 1 | 7.75 |
| 4 | $1\frac{1}{4}$ | $\frac{7}{8}$ | 7.00 |
| 5 | $1\frac{1}{8}$ | $\frac{3}{4}$ | \$2.25 |

WIRE ROPE CLIPS

No. 6379



A simple clip consisting of a plate with spiral corrugations to fit between strands of rope and prevent its slipping and a U bolt to tighten ropes against each other and against plate. Bolt is made of best wrought steel; plate is of malleable iron; both heavy enough to clamp rope firmly without danger of breaking. Will stand as much strain as rope to which it is attached.

Galvanized

| Diam. Rope, Inch | Per Hundred | Diameter Rope, Inch | Per Hundred | Diameter Rope, Inch | Per Hundred | Diameter Rope, Inch | Per Hundred |
|------------------|-------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|
| $\frac{3}{8}$ | \$8.00 | $\frac{7}{8}$ | \$15.50 | $\frac{3}{4}$ | \$35.00 | $1\frac{1}{4}$ | \$112.00 |
| $\frac{1}{4}$ | 8.00 | $\frac{1}{2}$ | 18.50 | $\frac{7}{8}$ | 50.00 | $1\frac{3}{8}$ | 130.00 |
| $\frac{5}{16}$ | 9.00 | $\frac{9}{16}$ | 24.50 | 1 | 60.00 | $1\frac{1}{2}$ | 150.00 |
| $\frac{3}{8}$ | 12.00 | $\frac{5}{8}$ | 24.50 | $1\frac{1}{8}$ | 95.00 | ... | ..... |

TILLER ROPE CLAMPS

IRON AND BRASS

No. 6381



Malleable iron, hot galv. (heavy type) and cast brass with V shaped grooves to insure holding on tiller line. Sizes $\frac{1}{8}$ to $\frac{1}{4}$ have two screws, others have three.

| For Rope Diameter, Inch | Length, Inches | Width, Inches | Galvanized Each | Brass Each |
|-------------------------|------------------|-----------------|-----------------|------------|
| $\frac{1}{8}$ | $1\frac{13}{16}$ | $\frac{3}{4}$ | \$0.15 | \$0.15 |
| $\frac{3}{16}$ | $2\frac{1}{2}$ | $\frac{3}{4}$ | .20 | .20 |
| $\frac{1}{4}$ | $2\frac{13}{16}$ | $\frac{15}{16}$ | .25 | .25 |
| $\frac{5}{16}$ | $2\frac{3}{4}$ | $1\frac{1}{16}$ | .30 | .30 |
| $\frac{3}{8}$ | $2\frac{7}{8}$ | $1\frac{1}{8}$ | .35 | .35 |

WATER PAILS

HEAVY—GALVANIZED

Made of heavy gauge steel, galvanized; heavy wired top rim; tinned wire bail; heavy bottom roll on the foot; riveted ears.



| Nos. | Trade Capacity, Quarts | Size, Inches | Weight per Doz., Lbs. | Per Dozen |
|------|------------------------|--------------------------------------|-----------------------|-----------|
| 1310 | 10 | $10\frac{1}{2} \times 8\frac{3}{4}$ | 30 | \$8.55 |
| 1312 | 12 | 11×10 | 35 | 9.20 |
| 1314 | 14 | $11\frac{1}{2} \times 10\frac{1}{4}$ | 42 | 10.50 |
| 1316 | 16 | $11\frac{1}{2} \times 10\frac{7}{8}$ | 46 | 11.85 |

Twelve in a Bundle

HERCULES
EXTRA HEAVY
GALVANIZED

Made extra strong throughout of extra heavy gauge galvanized steel; heavily wired top rim; heavy tinned iron wire bail; strong foot with heavy bottom roll; wide loop ears.



| Nos. | Trade Capacity, Quarts | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|------------------------|--------------------------------------|------------------------|-----------|
| 1510 | 10 | $10\frac{3}{4} \times 9\frac{5}{8}$ | 36 | \$10.80 |
| 1512 | 12 | $11\frac{7}{8} \times 10\frac{1}{4}$ | 48 | 11.25 |
| 1514 | 14 | $12\frac{1}{2} \times 10\frac{7}{8}$ | 54 | 12.30 |
| 1516 | 16 | $12\frac{1}{2} \times 11\frac{3}{4}$ | 57 | 14.40 |
| 1520 | 20 | $12\frac{3}{4} \times 12\frac{3}{4}$ | 68 | 17.25 |

Twelve in a Bundle

FIRE PAILS



Seamed; round bottom, heavy rolled top; wire bail; riveted ears; stenciled with the word "FIRE."

| Nos. | Trade Capacity, Quarts | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|------------------------|--------------|------------------------|-----------|
| 212 | 12 | 10½x10¾ | 22½ | \$9.00 |
| 214 | 14 | 11 x12 | 25 | 10.00 |

Twelve in a Bundle

MARINE OILERS

Made of pure zinc with special spring brass bottom or made of all brass.

Zinc with Brass Bottom

| Nos. | Length Spout, Inches | Weight per Gross, Lbs. | Per Gross | Extra Sprouts, per Gross |
|-----------|----------------------|------------------------|-----------|--------------------------|
| 3 | 4 | 30 | \$56.00 | \$16.00 |
| 4 | 6 | 37 | 70.00 | 18.00 |
| All Brass | | | | |
| 33 | 4 | 32 | \$100.00 | \$28.00 |
| 44 | 6 | 39 | 130.00 | 32.00 |



FLOTILLA—STEEL

Made of high grade steel with an anti-rust finish; spout has a rolled thread and leather washer; clock spring steel bottom.



| Nos. | Capacity | Length Spout, Inches | Weight per Dozen, Lbs. | Per Gross |
|------|-----------|----------------------|------------------------|-----------|
| 00 | ¾ Ounces | 2 | 1 | \$12.00 |
| 0 | 1½ Ounces | 2 | 1½ | 15.00 |
| 1 | ¼ Pint | 3 | 2¼ | 18.00 |
| 3 | ⅓ Pint | 5 | 2¾ | 27.00 |
| 4 | ½ Pint | 5 | 3¼ | 33.00 |
| 5 | 1 Pint | 5 | 4¼ | 42.00 |

OIL MEASURES

EASY-FILL

Made from heavy alloy coated steel, finished in brass lacquer. Heavy double torsion spring with hinge at valve insuring positive closing of valve.

| | Each |
|----------------|--------|
| 1 Quart | \$3.00 |
| 2 Quarts | 3.50 |
| 1 Gallon | 4.00 |



FUNNELS

FOR GASOLINE
WITH SPLASH GUARD AND
STRAINER

Made of heavy galvanized iron with a seamless splash guard and a fine mesh brass wire cloth strainer.

| No. | Diam., Inches | Length, Spout, Inches | Capacity, Quarts | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------|-----------------------|------------------|------------------------|-----------|
| 5606 | 8 | 7 | 2 | 12 | \$14.40 |
| 5607 | 10 | 7 | 4 | 18 | 18.00 |

BILGE SOLVENT



PURO

To be used in the bilge to clean out oil and grease.

| | Each |
|-----------------|--------|
| 5 lb. Can | \$2.50 |

WYANDOTTE DETERGENT

Is composed of a light flaky abrasive material and a small amount of purest lubricant which gives smooth action while cleaning. It may be used safely on any surface that water alone will not injure.

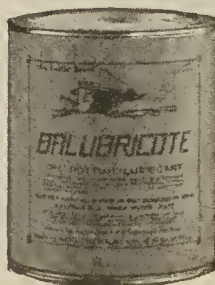


| | In Case | Each |
|-------------|---------|--------|
| 14 oz. Cans | 48 | \$0.15 |
| 5 lb. Bags | .. | .85 |

BOTTOM COATING

BALUBRICOTE

Produces a slippery smooth racing bottom on all types of craft. Reduces water resistance to a minimum, thereby increasing speed. Easy to apply and good for a season. A quart is sufficient for one coat over 140 square feet.



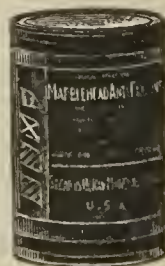
| Size Cans | Per Can |
|-----------------|---------|
| Quart Can | \$2.50 |

BOTTOM PAINTS

MARBLEHEAD GREEN

Used by finest cruisers, racers and by merchant vessels. Is anti-fouling, has long life, stays clean and gives a hard slippery surface. Is easy to apply, spreads easily and evenly and dries with a smooth surface. Made in two colors, emerald and medium green.

| Size Cans | Each |
|-----------|---------|
| Gallon | \$13.90 |
| ½ Gallon | 7.00 |
| Quart | 3.70 |



Six Gallons in a Case

BRIDGEPORT BRONZE

An elastic copper paint giving satisfactory service on cruisers, fast runabouts and other craft. Has good covering qualities and dries smoothly, evenly and quickly. Is easy to apply, has long life and very resistant to the weakening action of water. The original bronze bottom paint and one of the best anti-fouling bottom paints now made.

| | Each |
|-------------------------------|--------|
| Bridgeport Bronze—Quart | \$2.50 |

BOTTOM PAINTS

JAS. H. TARR'S
BROWN COPPER

For the bottoms of wooden vessels and boats; preserves them from worms, barnacles, grass and other marine growths. Bottom must be perfectly clean and dry before application. Two coats should be applied for a voyage of six months or more; the second coat can be applied immediately after first coat is laid on. Launching is recommended immediately after application of second as the

paint hardens under water. For best results, apply with a clean brush; brushes that have been used in oil paints must be thoroughly cleansed in benzine before being used in this paint. This paint is highly recommended and guaranteed to give perfect satisfaction.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|-----------|--------|
| Gallon | \$4.00 | Quart | \$1.10 |
| ½ Gallon | 2.10 | | |

Ten Gallons in a Case

RED YACHT COMPOSITION

This composition is bright red in color and fully protects from worms, barnacles, grass and other marine growths. Bottom must be perfectly clean and dry before application. Two coats must be applied to secure best results; the second coat can be applied immediately after first coat is laid on. Launching immediately after second coat is applied is recommended, as paint hardens under water. For best results apply with a clean brush; brushes that have been used in oil paint must be thoroughly cleansed in benzine before being used in this paint. This paint is highly recommended and guaranteed to give perfect satisfaction.



| Size Cans | Each | Size Cans | Each |
|-----------|--------|-----------|--------|
| Gallon | \$4.50 | Quarts | \$1.20 |
| ½ Gallon | 2.30 | | |

Ten Gallons in a Case

GREEN YACHT COMPOSITION

A medium green bottom composition which protects the bottom from worms, barnacles, grass and other marine growths. Before application be sure bottom is perfectly clean and dry; to secure best results two coats must be applied; second coat can be applied immediately after first coat is laid on. Launching immediately after second coat is applied is recommended, as paint hardens under water. To secure best results apply with a clean brush; brushes that have been used in oil paints must be thoroughly cleansed in benzine before being used in this paint. This paint is highly recommended and guaranteed to give perfect satisfaction.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|-----------|--------|
| Gallon | \$5.00 | Quart | \$1.35 |
| ½ Gallon | 2.60 | | |

Ten Gallons in a Case

SPEEDING GREEN

A high grade bottom paint made especially for bottoms of racing craft, both sailing and power driven. Considered the equal to any other paint of its kind; stays clean and dries with a hard, smooth, slippery surface which is essential on racing boats and which can be rubbed to a mirror-like surface if desired. It is guaranteed to give perfect satisfaction. In applying be sure bottom is perfectly dry and sandpapered to a smooth surface; be sure last coat is thoroughly hard and dry before applying second coat or launching. Dries hard in 18 to 24 hours.

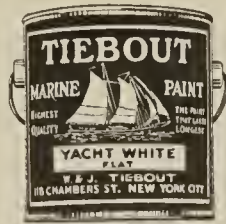
| Size Cans | Each | Size Cans | Each |
|-----------|---------|-----------|--------|
| Gallon | \$14.00 | Quart | \$3.60 |
| ½ Gallon | 7.10 | | |

Ten Gallons in a Case



YACHT PAINTS

YACHT WHITES



A high grade white paint for exterior use; holds its whiteness and is exceptionally durable; will not break, chip or crack when properly applied; leaves a perfect surface for repainting; dries dust free in a few hours and hard over night; furnished in Flat, Gloss White, Semi-Gloss.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|-----------|--------|
| Gallon | \$4.50 | Quart | \$1.25 |
| ½ Gallon | 2.40 | | |

Six Gallons in a Case

YACHT BLACKS

Furnished in Flat and Gloss.

| | |
|----------|--------|
| Gallon | \$4.00 |
| ½ Gallon | 2.10 |
| Quart | 1.10 |

MARINE FLAT WHITE

A flaking flat white for topsides of boats, can be scrubbed all season if two or more coats are applied.

| | |
|----------|--------|
| Gallon | \$4.00 |
| ½ Gallon | 2.10 |
| Quart | 1.10 |

FLAT CABIN PAINTS

INTERIOR

Decorative and preservative finishes stand repeated washing; covers from 250 to 300 square feet to a gallon, 2 coats; dries dust-free in a few hours and hard over night.



COLORS

White, Ivory, Pink, Buff, Yellow, Gray, Green, Blue.

| Cans | Each | Size Cans | Each |
|--------|--------|-----------|--------|
| Gallon | \$3.50 | Quart | \$1.00 |
| Gallon | 1.90 | | |

Six Gallons in a Case

ENGINE ENAMEL



A durable enamel for engines; its use will act as a protection against rust and also improve the appearance of the engine; suitable for both open and closed boats' engines.

COLORS

Gray—Heat resisting.
Black—Heat resisting.
Red, Green and Blue.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|-----------|--------|
| ½ Gallon | \$2.70 | Pint | \$0.80 |
| Quart | 1.45 | ½ Pint | .65 |

Six Gallons in a Case

DECK PAINT



A superior coating for wood and steel decks; dries quickly, is tough and elastic, and resists to a remarkable degree the abuses to which a paint of this kind is subjected; covers from 300 to 350 square feet to a gallon, 2 coats; dries dust free in a few hours and hardens over night. Nos. 722-719-124 special price.

| Nos. | Colors | Nos. | Colors |
|------|-----------------|------|--------------|
| 714 | Marine Buff | 720 | Dark Brown |
| 706 | Cream | 305 | Dark Gray |
| 705 | Colonial Yellow | 301 | Lead Color |
| 713 | Light Sage | 306 | Pearl Gray |
| 489 | Blue | 704 | French Gray |
| 718 | Olive | ... | ..... |
| 723 | Dark Green | ... | ..... |
| 711 | Sky Blue | 124 | Bright Red |
| 300 | Stone | 719 | Bright Green |
| 304 | Tan | 722 | Crimson |
| 310 | Salmon Buff | .... | ..... |

| Size Cans | Each | Size Cans | Each |
|------------|--------|-----------|--------|
| Gallon | \$4.00 | Quart | \$1.10 |
| 1/2 Gallon | 2.10 | .... | ..... |

Six Gallons in a Case

CANOE ENAMEL

A durable salt water resisting finish for canoes and small boats; it will withstand to a remarkable degree the hard knocks small boats receive; furnished in black, blue, green, red and yellow.

| Size Cans | Each | Size Cans | Each |
|------------|--------|-----------|--------|
| 1/2 Gallon | \$2.70 | Pint | \$0.80 |
| Quart | 1.45 | 1/2 Pint | .50 |
| | | | |
| | | | |

STANCHION ENAMEL

For painting metal deck fittings to match wood in mahogany or oak colored enamel.

| Size Cans | Each |
|-----------|--------|
| 1/2 Pints | \$0.50 |
| Pint | .80 |
| Quarts | 1.45 |

Colors in Oil

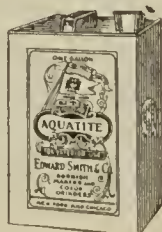
1 Lb. Cans
5 Lb. Cans

Colors in Japan

VARNISHES

SMITH'S

Used on any surface where a salt water, sun or weatherproof finish is required; for boats, automobiles, aeroplanes, carriages or anywhere around a house, either indoors or outdoors; easy to apply, lies evenly on the surface and flows freely; dries dust-free in a few hours, hard over night.



| Size Oan | Each | Size Cans | Each |
|------------|--------|-----------|--------|
| Gallon | \$6.50 | Pint | \$1.00 |
| 1/2 Gallon | 3.45 | 1/2 Pint | .60 |
| Quart | 1.85 | .... | ..... |

VARNISHES

JAP SPAR VARNISH

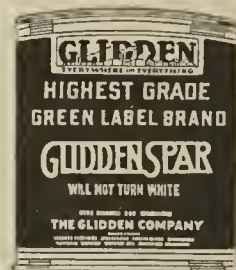
An extremely durable varnish for use on exterior surfaces of wood or metal exposed to the weather or to hard usage of any kind. Pale in color. Dries dust free in two or three hours. Hardens in twenty-four hours with a full brilliant lustre. Resists hot, cold, fresh and salt water. Will not turn white.



| Gal. | 1/2 Gal. | 1/4 Gal. | 1/8 Gal. | 1/16 Gal. |
|--------|----------|----------|----------|-----------|
| \$5.75 | \$3.05 | \$1.60 | \$0.90 | \$0.55 |

GLIDDENSPAR VARNISH

By actual test, is the most durable varnish obtainable. Made of Bake-lite, Synthetic Gums and specially treated oils. Dries dust free in two or three hours. Hard in twenty-four hours. High lustre. The most durable varnish for all purposes.



| Gal. | 1/2 Gal. | 1/4 Gal. | 1/8 Gal. | 1/16 Gal. |
|--------|----------|----------|----------|-----------|
| \$5.75 | \$3.05 | \$1.60 | \$0.90 | \$0.55 |



VALSPAR

Extra heavy bodied, developed especially for marine use. Possesses Valspar's unequalled resistance to water and weather plus extra heavy body and a much thicker film.

| Sizes.... | Pint | Quart | 1/2 Gal. | 1 Gal. |
|-----------|--------|--------|----------|--------|
| Each.... | \$1.10 | \$2.00 | \$3.90 | \$7.50 |

VALSPAR MALABAR

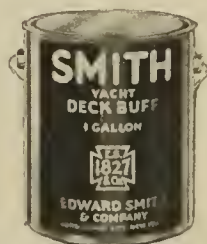
Wood bottoms only. "Slippery as an eel"—that's MALABAR, the wonderful anti-fouling and racing compound for cruising and racing. Nothing like it on the market.

| Sizes.... | Quart | 1/2 Gal. | 1 Gal. |
|-----------|--------|----------|---------|
| Each.... | \$2.65 | \$5.15 | \$10.00 |



EDWARD SMITH DECK PAINT

Withstand the most rigorous action of water, wind and wear. Resist the action of blistering sun and unaffected by extreme cold. Produce a hard surface that is sufficiently elastic to give when walked upon, especially on canvas decks. Flows easily, dries quickly, gives an even-toned surface and will not whiten, chalk or bleach. Furnished in twelve colors.



| Size Cans | Each | Size Cans | Each |
|------------|--------|-----------|--------|
| Gallon | \$6.50 | Pint | \$1.00 |
| 1/2 Gallon | 3.45 | 1/2 Pint | .60 |
| Quart | 1.85 | .... | ..... |

CAULKING CEMENT

STAY-TITE—MARINE



Ready to use as it comes from the can, without mixing or heating; easily and quickly applied with a putty knife; it is a paste-like cement that permanently seals up cracks, seams, joints, and checks of watercraft; works equally well on wet or dry surfaces and boats; can be used immediately after applying, if necessary, although it is best to give the material time to set; it is permanent, retains its elasticity and is not affected by expansion and contraction or become brittle and fall out.

Supplied in black or grey.

| Size Cans | Black | Gray |
|------------|--------|--------|
| Emergency | \$0.25 | \$0.30 |
| 1½ Pounds | .35 | .75 |
| 3 Pounds | 1.00 | 1.40 |
| 6 Pounds | 1.90 | 2.60 |
| 12 Pounds | 3.60 | 4.90 |
| 25 Pounds | 7.00 | 9.25 |
| 50 Pounds | 13.50 | 16.00 |
| 100 Pounds | 25.00 | 30.00 |

Note—Prime caulking cotton before STAY-TITE is applied.

Use black STAY-TITE as it has better sticking qualities; grey is used only where white paint is going to be used.

LIQUID CEMENT

AMBROID

A glue, cement and solder combined in one; waterproof, flexible and heat resisting and is not affected by oil, grease or gasoline; for repairing articles of wood, leather, canvas or fabric, stone and earthenware and all porous materials.

| Size | Can, Ozs. | Weight per Dozen Lbs. | Per Can |
|-----------|-----------|-----------------------|---------|
| Household | 2 | 2½ | \$0.30 |
| Standard | 4 | 6 | .50 |



SEAM COMPOSITION



KUHLS—ELASTIC—No. 1

For Use Above Waterline

A filler for deck seams, weather checks, etc., and in all places where a tight joint is required; does not become hard; remains elastic and flexible, adhering to the sides of seams, etc., and yielding to the swelling and shrinking of same; has long life and only wears down with the planking; furnished in black, mahogany, white and yellow.

| Size Cans, Lbs. | Each | Size Container | Each |
|-----------------|--------|----------------|---------|
| 1 | \$0.30 | 12½ Lb. Pails | \$ 2.75 |
| 5 | 1.50 | 50 Lb. Drums | 11.00 |

For Use Below Waterline—Elastic No. 2

Furnished in black, grey and white. Provides a permanent filling for all seams under and above the waterline. Does not become hard or fall out. One hundred pounds of Elastic seam composition will fill 3000 feet of seams ¼ inch wide and deep. Is used also for setting port holes or other glass lights.

| Size Cans, Lbs. | Each | Size Container | Each |
|-----------------|--------|----------------|--------|
| 1 | \$0.30 | 12½ Lb. Pails | \$2.75 |
| 5 | 1.50 | 50 Lb. Drums | 11.00 |

VARNISH REMOVER

BULL DOG CREAM



A varnish and paint remover that is absolutely free from alkali, fusel oil, carbon bisulphate, carbolic acid, nitrobenzine, etc. Its odor is slight and agreeable; it does not evaporate readily and remains moist longer than the liquid removers; it removes paint or varnish that has been baked on metal or wood and does not harm the surface of wood work or metals after use. Can also be furnished in the liquid.

| Cream | Each | Liquid | Each |
|----------|--------|----------|--------|
| Size Can | | Size Can | |
| Gallon | \$1.85 | Pint | \$0.35 |
| ½ Gallon | 1.10 | ½ Pint | .20 |
| Quart | .60 | ..... | ..... |

Ten Gallons to a Case

ADELITE CREAM

Most powerful, will not injure grain of the wood, stays wet longer, thereby making an easier and better job.

| Size Can | Each | Size Can | Each |
|----------|--------|----------|--------|
| Gallon | \$1.85 | Pint | \$0.35 |
| ½ Gallon | 1.10 | ½ Pint | .20 |
| Quart | .60 | ..... | ..... |

Ten Gallons to a Case



ENAMELS

RIPOLIN

Ripolin over a period of thirty years has proven its ability to withstand salt water and sun; stays white and rich in luster whether applied on decks, cabins, hulls or masts. There is no surface on a boat on which Ripolin cannot be used to advantage. Can be furnished in gloss, semi-gloss and flat white, in gloss and flat black and in a number of colors and tints.

Covers 600 square feet to a gallon, one coat.



COLOR TINTS

Ivory, Cream, Light Gray, Pearl Gray, Pink, Sky Blue, Sea Green

| Size Cans | Each | Size, Cans | Each |
|-----------|--------|------------|--------|
| Gallon | \$6.00 | Quart | \$1.80 |
| ½ Gallon | 3.25 | Pint | 1.00 |

PLASTIC WOOD

Handles like putty and hardens into wood. Is a wood compound of the consistency of thick paste which hardens on exposure to air. Sticks to wood or metal; oil and water-proof; will not crack, crumble or splinter. Holds screws, tacks or nails without splitting. Can be stained and finished like wood. Natural and mahogany carried in stock.



| Size Cans, Lb. | Display Carton | Corrugated Box | Weight per Carton, Lbs. | Each |
|----------------|----------------|----------------|-------------------------|--------|
| 1/4 | 12 | .. | 5 | \$0.35 |
| 1 | .. | 12 | 16 | 1.00 |
| 5 | .. | .. | .. | 3.50 |

PLASTIC WOOD IN TUBES

A most convenient package for any minor repairs where a small quantity is required.

Packed in individual cartons, twelve to a display box.

| Tube | Each |
|----------------|--------|
| 12 to a Carton | \$0.25 |

SOLVENT FLUID FOR SOFTENING PLASTIC WOOD

| Size Can, Oz. | Each | Size Can. | Each |
|---------------|--------|-----------|--------|
| 3 | \$0.25 | Quart | \$1.50 |
| 8 | .50 | ..... | ..... |

VARNISH BRUSHES



SHASTA
No. 46

Nickel plated steel ferrule; new style natural polished handle; black Chinese bristles, held by compression; solid center, chiseled edge; particularly adapted for every purpose where a high grade paint or varnish brush is required.

| Nos. | Width, Inches | Length Bristles, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------|-------------------------|-----------------|------------------------|-----------|
| 1 | 1 1/8 | 1 7/8 | 12 | 1 1/4 | \$5.10 |
| 2 | 1 5/8 | 2 1/8 | 12 | 1 7/8 | 6.49 |
| 3 | 2 1/8 | 2 3/8 | 12 | 3 | 9.30 |
| 4 | 2 5/8 | 2 5/8 | 6 | 4 | 12.87 |
| 5 | 3 1/8 | 2 5/8 | 6 | 4 3/8 | 13.92 |



EXTRA SHASTA
No. 47F

A high grade paint, varnish and trim brush; can be used in anything that will not harm the bristles; has black Chinese bristles, specially prepared long stock; is composition set in nickel plated steel ferrules; solid center, chiseled edge; varnished handle; illustration shows method of construction of brush.

| Nos. | Width, Inches | Length Bristles, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|---------------|-------------------------|------------------------|-----------|
| 22 | 1 5/8 | ... | 2 5/8 | \$7.70 |
| 33 | 2 1/8 | 2 7/8 | 3 1/4 | 9.81 |
| 44 | 2 5/8 | 3 1/8 | 4 1/8 | 13.36 |
| 55 | 3 1/8 | 3 3/8 | 5 1/8 | 16.83 |

Six in a Box



FOY
No. 1123F

Best selected black Chinese bristles, long stock; triple thick and chiseled point; is composition set; nickel ferrules; natural polished fancy shaped handle.

| Width, Inches | Length Bristles, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|---------------|-------------------------|-----------------|------------------------|-----------|
| 1 | 2 | 12 | 1 1/8 | \$4.66 |
| 1 1/2 | 2 1/4 | 12 | 1 3/4 | 6.20 |
| 2 | 2 1/2 | 12 | 2 1/2 | 8.36 |
| 2 1/2 | 2 3/4 | 6 | 3 1/2 | 11.11 |
| 3 | 3 | 6 | 4 1/2 | 14.19 |



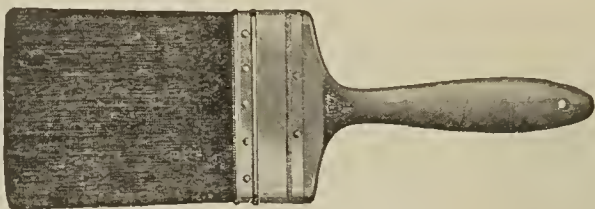
FLAG—OVAL
No. 1211F

Solid center, oval chiseled paint or varnish brush; beaver tailed semi-flat handle; nickel plated ferrule, "swedged" black Chinese bristles.

| Nos. | Diameter, Inches | Length Bristles, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|------------------|-------------------------|------------------------|-----------|
| 33 | 1 3/4 | 3 1/4 | 4 1/4 | \$16.44 |
| 44 | 2 | 3 5/8 | 5 5/8 | 23.47 |
| 55 | 2 1/8 | 3 7/8 | 6 1/4 | 29.47 |

Six in a Box

PAINT BRUSHES



FRIENDLY PAINTER

Nickel plated ferrules, pure black Chinese bristles, natural wood polished oval or Beaver tail handles. Extra long stock.

| Nos. | Width, Inches | Length of Bristles, Inches | Per Dozen |
|------|---------------|----------------------------|-----------|
| 23 | 3 1/2 | 3 3/4 | \$23.10 |
| 32 | 3 | 4 | 25.69 |
| 24 | 3 1/2 | 4 | 28.78 |
| 25 | 4 | 4 1/4 | 34.61 |
| 36 | 3 1/2 | 4 1/4 | 32.56 |
| 48 | 4 | 4 1/2 | 38.98 |
| 58 | 4 1/2 | 4 3/4 | 46.05 |
| 68 | 5 | 4 3/4 | 51.37 |

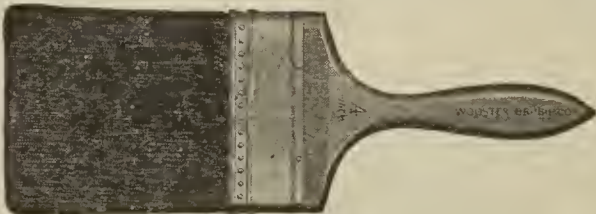
WALL BRUSHES



No. 20
OHIO F

Extra long selected black Chinese bristles; nickel ferrule; natural polished beaver tail handle; will not shed bristles or come apart; works equally well in varnish, shellac, hot glue, etc.

| Width, Inches | Length of Bristles, Inches | Weight per Dozen, Lbs. | Per Dozen |
|---------------|----------------------------|------------------------|-----------|
| 3 3/8 | 3 3/4 | 7 | \$32.01 |
| 3 3/4 | 4 | 8 3/8 | 37.62 |



No. 1272-F
FAD WALL

Foss-set Chinese bristles; nickel ferrule; natural varnished handle; will not shed bristles or come apart.

| Width, Inches | Length of Bristles, Inches | Weight per Dozen, Lbs. | Per Dozen |
|---------------|----------------------------|------------------------|-----------|
| 3 | 3 1/8 | 4 5/8 | \$13.13 |
| 3 1/2 | 3 3/8 | 5 3/8 | 16.87 |
| 4 | 3 5/8 | 6 1/2 | 20.08 |
| 4 1/2 | 3 7/8 | 7 1/2 | 25.01 |

All Above, Six in a Box

ARTISTS' BRUSHES OR SASH TOOLS



FURY
No. 1543F

Nickel ferrules; polished handles; black Chinese bristles; flat chiseled edge.

| Nos. | Diameter, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|------------------|------------------------|-----------|
| 2 | 1 1/8 | 1 1/4 | \$3.50 |
| 4 | 1 3/4 | 1 | 4.36 |
| 6 | 1 1/8 | 1 3/8 | 4.81 |
| 8 | 2 1/8 | 2 | 6.25 |
| 10 | 2 1/4 | 2 1/2 | 7.52 |

Twelve in a Box

ASSORTMENT



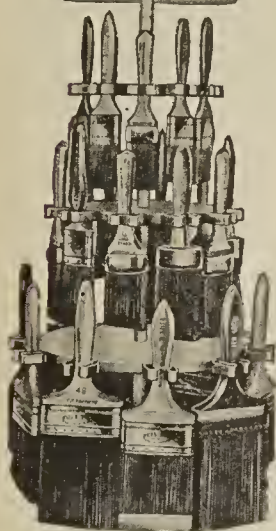
After carefully studying actual sales records of individual brushes, we made up these attractive, merchandising displays and assortments.

TOWER DISPLAY STAND SPOTLIGHT 30 BRUSHES

The Wooster Tower displays 30 different brushes—covering every popular style, price, and kind—yet takes up only 14 inches of space on the counter, ledge, or open table. The Wooster Tower is beautifully lithographed in striking colors. Brushes clip on, customers see—select—buy. Put Wooster Brushes in the spotlight of attention where your trade is constantly reminded to buy a nationally advertised Wooster Brush from you.

The Tower Display is Sold Only to Wooster Dealers. Write for Full Information

Price of Stand only \$3.50 Net



COUNTER DUSTERS

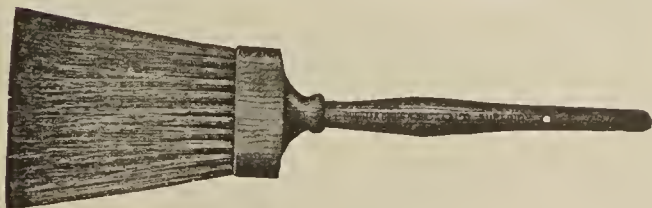


No. 622

| No. | Length of Blade, Inches | Length of Stock Clear of Blade, Inches | Stock | Per Dozen |
|-----|-------------------------|--|-------|-----------|
| 0 | 3 | 8 | 2 5/8 | \$18.18 |

Packed Six in a Box

PAINTERS' DUSTERS



Round Polished Handles. Black Bristles Outside, Grey Center.

No. 12—Length 3 3/4 Inches \$21.30

Per Dozen

GASOLINE BRUSHES



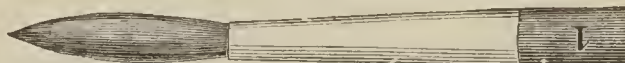
Nickel Plated Seamless Steel Ferrules, Long Round Handles. Best Grade of Paint Stumps. Pointed on End.

No. 25—Diameter 1 1/2 Ins.; Length 2 3/4 Ins. \$14.74

Per Dozen

Packed Twelve in a Box

MARKING BRUSHES



No. 515

White metal bands; natural finish wood handles; good grade of black bristles; dome point; in three sizes.

| Size, Nos. | Weight per Dozen, Ozs. | Per Dozen | Size, Nos. | Weight per Dozen, Ozs. | Per Dozen |
|------------|------------------------|-----------|------------|------------------------|-----------|
| 2 | 2 | \$.73 | 6 | 4 | \$1.10 |
| 4 | 2 | .86 |  |  | .... |

SHIP SEAM BRUSHES



Fine black bristles; brass wire drawn; sanded finish, plain wood handle.

No. 525

| Size, Inches | Weight Each, Ounces | Per Dozen | Size, Inches | Weight Each, Ounces | Per Dozen |
|--------------|---------------------|-----------|--------------|---------------------|-----------|
| 5 | 2 | \$7.40 | 6 | 4 | \$7.80 |
| 5 1/2 | 3 1/4 | 7.50 |  |  | .... |

Twelve in a Box

PITCH PAYERS

GALVANIZED

For paying seams on decks only; fills seam with pitch after it has been caulked with oakum. Made of sheet iron, hot galvanized finish.



Pitch Payers Each \$2.00

ELECTRIC PITCH PAYERS

Permits heating marine glue when attached to any 110-volt light current. Will heat to proper paying consistency in about 30 minutes; heats 5 pounds of marine glue, like Jeffreys No. 1, at one time—enough to pay about 125 feet of seam. Patented fin guard keeps shell at the proper height from the deck to eliminate air bubbles. Constructed of copper with special heating element, insulated and armored. When used outside in low temperatures or cold winds, a special feature prevents the glue from chilling. Size, 7x15 inches.

Electric Pitch Payer Each \$50.00

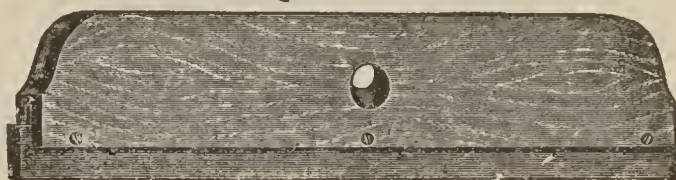
PITCH MOPS



Made in accordance with standard specifications, using only a good grade of wool. Has a 42-inch handle with a specially designed head that cannot come off and which holds the mop secure under the severest tests.

Pitch Mops—8 Ounce Head Per Dozen \$10.80

SQUEEGES

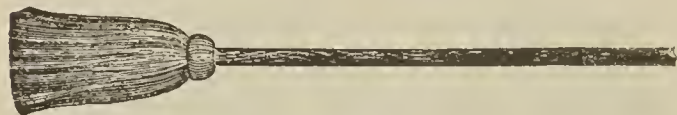


Pure gum rubber floor scrubber, with 3/8-inch clear sound hardwood block. Rubber strip is 1/8 inch thick; fasten in wood block with three screws, which acts as a clamp.

| Nos. | Length, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|----------------|------------------------|-----------|
| 2-12 | 12 | 11 1/2 | \$10.50 |
| 2-16 | 16 | 15 | 13.00 |

In Individual Cartons

YACHT MOPS



COTTON

Made of two-ply cotton twine and used extensively as a dry mop; as the yarn is fine, it contains a large number of ends and therefore will absorb the dust more readily than a coarser yarn; the high grade of cotton used insures against leaving lint on the decks; the heads are securely fastened and first grade handles are used.

| Size Head, Ounces | Length Handle, Inches | Weight Each, Lbs. | Per Dozen |
|----------------------|--------------------------|----------------------|--------------|
| 8 | 38 | 1 1/4 | \$8.70 |
| 12 | 48 | 1 1/2 | 9.70 |
| 16 | 48 | 1 3/4 | 15.10 |
| 20 | 48 | 1 7/8 | 20.00 |

YACHT BROOMS

| | Per Dozen |
|--------------------|-----------|
| Round Rattan | \$15.00 |
| Flat Rattan | 14.00 |

SCRUB BRUSHES

Good stiff bristles are wired in hardwood blocks; blocks have threaded holes for handles; standard quality.

| | Per Dozen |
|--|-----------|
| Scrub Brushes—Length, 11 1/2 Inches..... | \$5.65 |

PUTTY KNIVES



Forged, polished, crucible steel blade, scale tang; beechwood handle; three rivets.

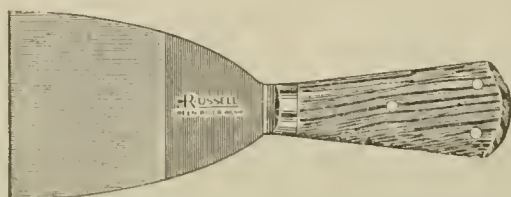
| No. | Blade | Length Blade, Inches | Width, Blade, Inches | Weight per Dozen, Lbs. | Per Dozen |
|-----|---------|-------------------------|-------------------------|---------------------------|--------------|
| 118 | Stiff | 3 1/2 | 1 5/8 | 2 | \$3.00 |
| 120 | Elastic | 3 1/2 | 1 7/8 | 2 | 3.60 |

SCRAPING KNIVES



Forged, polished crucible heavy steel blade, scale tang; large cocobolo handle; polished metal bolster. For professional painters.

| No. | Blade | Length Blade, Inches | Width, Blade, Inches | Weight per Dozen, Lbs. | Per Dozen |
|-------|---------|-------------------------|-------------------------|---------------------------|--------------|
| 1540 | Stiff | 3 5/8 | 1 5/8 | 2 1/2 | \$6.75 |
| 1540E | Elastic | 3 5/8 | 1 5/8 | 2 1/2 | 7.20 |



Full forged, crucible steel blade; tempered and ground; metal lock bolster; cocobolo handle; has four rivets.

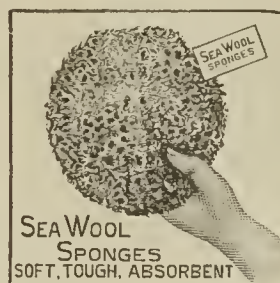
No. 530—Stiff Blade

| Width Blade, Inches | Weight Per Dozen Lbs. | Per Dozen |
|---------------------------|-----------------------------|--------------|
| 2 1/2 | 4 1/8 | \$10.00 |
| 3 | 4 1/8 | 11.55 |

No. 530E—Elastic Blade

| Width Blade, Inches | Weight Per Dozen Lbs. | Per Dozen |
|---------------------------|-----------------------------|--------------|
| 2 1/2 | 3 3/4 | \$11.50 |
| 3 | 3 1/2 | 13.00 |

NAVAL SPONGES



A GOOD GRADE SPONGE
For bailing and cleaning a
boat.

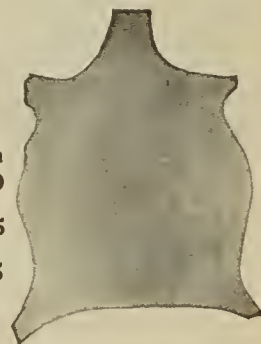
| | Each |
|--|--------|
| Medium | \$0.50 |
| Large | 1.00 |
| Packed Assortment of 12 Sponges | 6.75 |

CHAMOIS

QUALITY BRAND

For general use on shipboard.
Regular grade.

| | Each |
|---------------------------|--------|
| No. 6—12x14 Inches | \$0.50 |
| No. 15—20x26 Inches | 1.85 |
| No. 17—26x28 Inches | 2.35 |



LINOLEUM CEMENT

NAUTILUS

A waterproof plastic cement for attaching linoleum, rubber matting, composition tile, etc. to cement wood or metal. Passes the U. S. Government specifications and is used on navy craft, steamships, yachts and runabouts. One gallon will cement about 10 square yards of covering.

| Size Cans | Per Can | Size Cans | Per Can |
|---------------|---------|---------------|---------|
| 1/2 Pint..... | \$0.35 | Gallon..... | \$3.20 |
| Pint..... | .55 | 5 Gallon..... | 15.50 |
| Quart..... | .90 | ..... | .... |

LINOLEUM PASTE

WATER-RESISTING

| | | | |
|----------------------------------|--------|--------------|--------|
| Pint | \$0.35 | Quart | \$0.50 |
| 1/2 Gal. | .75 | Gallon | 1.10 |
| 5 Gallon Pails, per Gallon | .85 | | |

WING DOPE

NITRATE

Used on aircraft wings, deck and hoods of outboards and speed boats. Produces a tough, smooth surface on fabric that is waterproof and unaffected by changes in temperature. Can be tinted different colors.

| Size Cans | Per Can | Size Cans | Per Can |
|---------------|---------|-----------------|---------|
| 1/2 Pint..... | \$0.50 | 1/2 Gallon..... | \$2.60 |
| Pint..... | .80 | Gallon..... | 4.50 |
| Quart | 1.50 | 5 Gallon..... | 21.00 |

MARINE YACHT SEAM GLUE



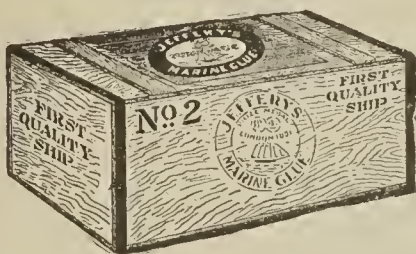
JEFFERY'S—No. 1 EXTRA QUALITY

For deck and hull seams of all pleasure boats; makes a tight seam; is not affected by weather changes; is always elastic; to use, heat until it becomes a free flowing liquid and pour into seam or crack with a paying shell, this makes a perfect adhesion in seam from caulking to top of plank; furnished in black,

white, yellow and mahogany; 1 pound fills about 30 feet of seam.

| Size Cans, Lbs. | Each | Size Boxes Lbs. | Per Pound |
|-----------------|--------|-----------------|-----------|
| 1 | \$0.80 | 14 | \$0.65 |
| 2 | 1.55 | 28 | .65 |
| 5 | 3.70 | 112 | .65 |

STEAMSHIP MARINE GLUE



JEFFERY'S—No. 2 FIRST QUALITY

For deck seams of all commercial craft where seams are wide and deep, so as to give plenty of grip; built for hard service; is durable and flexible; furnished in black, white and yellow; 1 pound fills about 25 feet of seam.

| Size Cans, Lbs. | Each | Size Boxes, Lbs. | Per Pound |
|-----------------|--------|------------------|-----------|
| 1 | \$0.60 | 14 | \$0.40 |
| 2 | 1.00 | 28 | .40 |
| 5 | 2.40 | 112 | .40 |

BARGE MARINE GLUE



JEFFERY'S—No. 3

For seams of barges, lighters and work boats; also used by tug and barge owners, steamship companies and ship-yards; gives good service and saves price of recaulking; 1 pound fills about 25 feet of seam.

No. 3—In 14, 28, 56 and 112 Lb. Boxes; and 336 Lb. Barrels \$0.30 Per Pound

SEAM FILLER

FERDICO



A waterproof and adhesive plastic material for filling seams in hull and deck; will expand and contract with wood; is easy to apply; used same as putty; will not dry out or crumble; furnished ready for use with directions on all cans; 1 pound fills about 15 feet of seam. Especially good under water.

| Size Cans, Lbs. | Each | Size Cans, Lbs. | Each |
|-----------------|--------|-----------------|--------|
| 1/2 | \$0.30 | 10 | \$4.00 |
| 1 | .55 | 25 | 8.75 |
| 2 | 1.00 | 50 | 16.50 |
| 5 | 2.25 | .. | .... |

MARINE GLUE

JEFFERY'S—No. 7—SOFT QUALITY



For covering boats with canvas or cloth; for applying canvas to decks, cabin tops and bulkheads; the only material to use to make a boat water-tight; water and weatherproof; to use, heat to a flowing liquid and apply with a wire brush; 1 pound to about 3 square feet.

| Size Cans, Lbs. | Each |
|-----------------|--------|
| 1 | \$0.80 |
| 2 | 1.55 |
| 5 | 3.70 |

IN BOXES

14, 28, 56 and 112 Lbs.....\$0.65 Per Pound

LIQUID MARINE GLUE

JEFFERY'S—C QUALITY

A waterproof, elastic glue that does not harden in the can; for attaching canvas, muslin, felt, etc., to various materials; can also be used in all joints, under mouldings, bulkheads, etc.; used in place of white lead paint to keep water out; directions on all cans; 1 gallon covers about 11 square yards.



| Size Cans | Each | Size Cans | Each |
|-----------|--------|------------|--------|
| 1/2 Pint | \$0.55 | 1/2 Gallon | \$3.50 |
| Pint | 1.00 | Gallon | 6.60 |
| Quart | 1.80 | 5 Gallon | 29.00 |

CANOE GLUE

JEFFERY'S SPECIAL

Makes a lasting, water-tight repair to any canoe or shell; easy to use at any time; always remains elastic and will not crack or crumble; a small quantity is all that is needed and when used with silk or muslin will give a job that is not affected by weather changes; directions on every can; 1 pound covers about 3 square feet; furnished in black, yellow and white.

Per Can
Canoe Glue—Weight of Can, 2 Ounces.....\$0.50



GLUE CEMENT

FERDICO—MARINE BRAND

A waterproof liquid cement not affected by any weather or water; used for laying linoleum, oil cloth, etc., and for attaching cork, canvas, muslin, felt, cloth, etc., to glass, concrete, wood, metal, etc.; 1 gallon covers about 11 square yards.



| Size Cans | Each | Size Cans | Each |
|-----------|--------|------------|--------|
| 1/2 Pint | \$0.55 | 1/2 Gallon | \$3.50 |
| Pint | 1.00 | Gallon | 6.60 |
| Quart | 1.80 | 5 Gallon | 29.00 |

WATERPROOF JOINT GLUE

STANZ-ALL

A casine glue in powder form that holds and withstands constant dampness and moisture; to use, add water; no heat or glue pot required. Used in making hollow spars, plywood, etc.

| Size Cans, Lbs. | Each | Size Cans, Lbs. | Each |
|-----------------|--------|-----------------|--------|
| 1/4 | \$0.20 | 2 | \$1.10 |
| 1/2 | .35 | 5 | 2.75 |
| 1 | .60 | .. | .... |

MARINE GLUE



FERDICO—STOP-A-LEAK

Has all the good points of marine glue; put up in stick form; easy to use with torch, soldering iron, etc.; does not deteriorate and is easy to carry; each tube has full directions on it. Waterproof, for repairing wood, canvas, metal boats, etc.

| | |
|------------------------------------|--------|
| | Each |
| Stop-A-Leak—Weight Each, 1 Lb..... | \$0.75 |
| Twelve in a Case | |

AVIATION GLUE



LIQUID

For double planking and batten seam construction. Prevents leakage and decay on chines, bilge stringers and boat frames. A gallon covers 100 square feet. Passes U. S. Govt. specifications and is used in the construction of wood and metal pontoons.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|---------------|--------|
| 1/2 Pint | \$0.50 | 1/2 Gallon | \$2.60 |
| 1 Pint | .80 | 1 Gallon | 4.50 |
| 1 Quart | 1.50 | 5 Gallon Pail | 21.00 |

WATERPROOFING LIQUID

20th CENTURY

Will waterproof anything that absorbs it. Adds little weight to the fabric to which it is applied, prevents mildew and acts as a preservative. Fabrics may be rolled or folded without cracking. No odor; buff or black.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|------------|--------|
| 1/2 Pint | \$0.35 | 1/2 Gallon | \$1.35 |
| Pint | .40 | Gallon | 2.50 |
| Quart | .75 | | |

GASKET CEMENT

20th CENTURY

A high grade gum cement for use on cylinder heads, crank cases and hose connection gaskets. Not affected by heat or cold. Forms a water, oil and pressure proof seal.

| Size Cans | Each | Size Cans | Each |
|-----------|--------|------------|--------|
| 1/2 Pint | \$0.45 | Quarts | \$1.45 |
| Pint | .80 | 1/2 Gallon | 2.80 |
| | | Gallon | 5.30 |

“SEAMSEAL”

Black, White and Mahogany

An improved Seam Compound ready for use, to be applied with a putty knife.

SEAMSEAL “skins” over quickly thus permitting it to be painted over without bleeding through the paint, its natural adhesion and resilience mean long service and satisfaction.

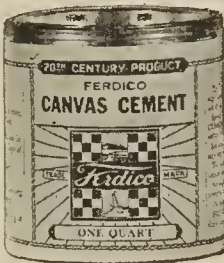
White Will Be Supplied Unless Otherwise Specified



| Size Cans | Each | Size Cans | Each |
|-----------|--------|-----------|--------|
| 1/2 Pound | \$0.30 | 5 Pounds | \$1.75 |
| 1 Pound | .40 | 10 Pounds | 3.00 |
| 2 Pounds | .75 | 50 Pounds | 14.50 |

CANVAS CEMENT

WATERPROOF—PERMANENT



Made especially for laying canvas on yacht decks and cabin tops; roofs and platforms of railway cars and busses. Will not bleed through light colored paints.

It is strong, tough and durable and will actually add to the length of life of the canvas.

May also be used as a canvas filler by applying a smooth coat to the top side of the canvas before painting.

| | | | |
|----------------|--------|---------------|-----------------|
| 1/2 Pint | \$0.35 | Gallon | \$3.20 |
| 1 Pint | .55 | 5 Gallons ... | \$3.10 per Gal. |
| 1 Quart | .90 | | |

METAL POLISH

OXFORD

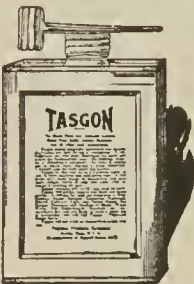
Polishes anything of metal, requiring very little rubbing to give a lustre of permanence and brilliancy. Furnished either in a liquid or cream.

| Sizes | Each |
|----------|--------|
| Gallon | \$2.50 |
| Quart | .90 |
| Pint | .50 |
| 1/2 Pint | .30 |



RUST SOLVENT

TASGON



Nuts, bolts, pipe fittings, etc., that are rusted, corroded or otherwise stuck, can be easily removed after applying a few drops of Tasgon; for use to prevent carbon, rust on springs and on brake connections, hinges and door locks; lubricates as well as prevents rust; Tasgon will clean all rusty surfaces.

| Size Cans | Each | Size Cans | Eac |
|-----------|--------|-----------|--------|
| 1/4 Pint | \$0.40 | Quart | \$1.50 |
| Pint | 1.00 | Gallon | 5.00 |

LUBRI—TASGON

A lubricating penetrating oil with absolutely no acid reaction. Can be used with regular lubricating oil to assure quick starting, more speed and adequate upper cylinder lubrication, in marine motors. Can also be used with same results as Tasgon.



| | Each | | Each |
|-----------------|--------|-----------------|--------|
| 3 Oz. Can | \$0.30 | Gallon | \$5.00 |
| Pint | 1.00 | 5 Gallons | 22.25 |
| Quart | 1.50 | | |

VALVE GRINDING COMPOUND

CLOVER BRAND

For quickly grinding valves, lapping cylinders, fitting piston rings, etc. Duplex can contains coarse and fine grease mixed compound. Can is fitted with quick grip covers and can be carried in kit.



| | Per Can |
|-------------------------|---------|
| 4 Ounce Cans | \$0.50 |
| 2-Ounce Cans | .30 |
| Twelve Cans in a Carton | |

FLINT SAND PAPER



FOR GENERAL USE

An extra quality sand paper; the abrasive material is flint quartz and the paper backing a special rope stock paper, especially adapted to the peculiar requirements of flint paper.

Sheets 8 3/4 x 10 1/2. Half Ream Packages (240 Sheets)

| Grit Nos. | Per Ream | Grit Nos. | Per Ream |
|--------------------|----------|----------------|----------|
| 3/0, 2/0, 1/0..... | \$ 6.75 | 2 | \$10.35 |
| 1/2 | 7.20 | 2 1/2 | 11.70 |
| 1 | 8.10 | 3 | 13.20 |
| 1 1/2 | 9.15 | Assorted | 9.15 |

Stock Sized Bundles as Follows: (Weights are Approximate)

| | | | | | | | | | | |
|----------------|--------|-----|-----|--------|-------|-------|----|-------|-------|-------|
| Grit Nos. | 3/0 | 2/0 | 1/0 | 1/2 | 1 | 1 1/2 | 2 | 2 1/2 | 3 | Asst. |
| Reams | 5 | 5 | 5 | 4 | 3 1/2 | 3 | 2 | 2 | 1 1/2 | 3 |
| Wt., per Rm... | 13 1/2 | 16 | 18 | 22 1/2 | 28 | 34 | 39 | 52 | 56 | 28 |

GARNET PAPER

MASTER CUTTING

Used practically exclusively for machine sanding of hardwoods by woodworking plants everywhere; harder and with sharper fracture than flint, cuts more freely and throws off the cuttings or dust.

In sheets, 9x11 inches.

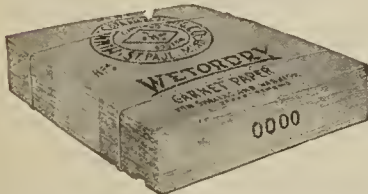


| Grit Nos. | Per Ream | Grit Nos. | Per Ream |
|------------|----------|-----------|----------|
| 4/0 to 2/0 | \$22.50 | 2 | \$42.00 |
| 0 | 25.00 | 2 1/2 | 46.50 |
| 1/2 | 29.00 | 3 | 51.20 |
| 1 | 33.00 | 3 1/2 | 56.30 |
| 1 1/2 | 37.50 | ... | .... |

Packed in Bundles for Shipment as Follows:

| | | | | | | | | |
|-----------------------|----|-------|-----|-------|-------|-------|-------|-----|
| Nos. | 00 | 0 | 1/2 | 1 | 1 1/2 | 2 | 2 1/2 | 3 |
| No. of Reams | 4 | 3 1/2 | 3 | 2 1/2 | 2 | 1 1/2 | 1 | 1 |
| Weight per Ream, Lbs. | 28 | 36 | 48 | 54 | 68 | 84 | 100 | 114 |

WET OR DRY GARNET PAPER



A waterproof abrasive paper made for wet sanding on rough stuff, sanding surfaces, varnishes, enamels, etc.; absolutely impervious to water, being especially

prepared to prevent shedding of mineral or wearing down of backing; finer numbers produce superior results to pumice flour and water on last coat of rubbing varnish, etc. Size of sheets, 9x11 inches.

| Grit, Nos. | Per Ream | Grit, Nos. | Per Ream |
|------------|----------|------------|----------|
| 8/0 | \$15.50 | 4/0 | \$19.00 |
| 7/0 | 15.50 | 3/0 | 21.00 |
| 6/0 | 15.50 | 2/0 | 23.00 |
| 5/0 | 16.75 | 1/0 | 25.50 |

EMERY CLOTH

For finishing and polishing all metals; made of high grade materials.

In sheets 9x11 inches.

| Nos. | Per Ream | Nos. | Per Ream |
|---------|----------|-------|----------|
| FF to O | \$30.00 | 2 | \$36.50 |
| 1/2 | 31.20 | 2 1/2 | 39.40 |
| 1 | 32.75 | 3 | 42.50 |
| 1 1/2 | 34.30 | ... | .... |

Per Ream

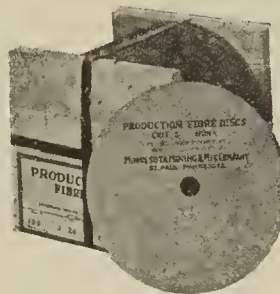
| | |
|---|---------|
| Crocus Cloth—Per Ream (2 Reams in a Bundle).... | \$30.00 |
| 480 Sheets of paper..... | 1 Ream |
| 20 Quires | 1 Ream |



SANDING DISCS

COMBINATION

Production Reinforced Paper and Cloth Back



For use on electric sanding machines and portable, flexible shaft outfits. Has tough flexible fibre back and aluminous oxide grains that are harder, tougher and sharper than garnet—faster cutting and longer life. Spaced grain; does not fill up as do ordinary discs. Furnished in 7 and 9 1/4 inch diameters in all

grits listed and with 7/8 inch shaft holes.

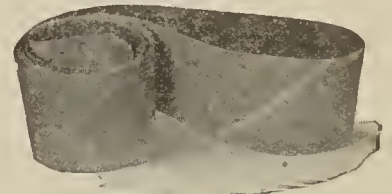
| Grit | Nos. | 9 1/4 Inch | 7 Inch |
|-------|------|------------|---------|
| 1/2 | 60 | \$13.40 | \$10.45 |
| 1 | 50 | 14.25 | 11.15 |
| 1 1/2 | 40 | 15.20 | 11.85 |
| 2 | 36 | 16.25 | 12.70 |
| 2 1/2 | 30 | 17.30 | 13.55 |
| 3 | 24 | 18.40 | 14.40 |

SANDING MACHINE BELTS

FOR TAKEABOUT

SANDERS

Regularly made of garnet cloth. Require no joining; size, 3x24 inches.



| Grit Nos. | Per 100 | Grit Nos. | Per 100 |
|-----------|---------|-----------|---------|
| 2/0 | \$18.50 | 1 1/2 | \$21.80 |
| 1/0 | 19.05 | 2 | 22.46 |
| 1/2 | 19.97 | 2 1/2 | 23.45 |
| 1 | 20.66 | 3 | 24.41 |

SIZE 4x27 INCHES

| Grit Nos. | Per 100 | Grit Nos. | Per 100 |
|-----------|---------|-----------|---------|
| 2/0 | \$32.11 | 1 1/2 | \$36.56 |
| 1/0 | 33.00 | 2 | 38.05 |
| 1/2 | 34.21 | 2 1/2 | 39.48 |
| 1 | 35.40 | 3 | 40.94 |

STEEL WOOL



AMERICAN

Steel wool is a product made from tempered steel and under the microscope presents the appearance of a fibre with two saw teeth. Cuts all obstructions and leaves a smooth surface. One pound packages.

| Size Nos. | Equal To | Per Package |
|-----------|---------------------------|-------------|
| 00 | Nos. 00 or 000 Sandpaper | \$0.75 |
| 0 | Pumice Stone | .50 |
| 1 | No. 0 Sandpaper | .45 |
| 2 | No. 1/2 Sandpaper | .40 |
| 3 | No. 1 and 1 1/2 Sandpaper | .35 |

Twenty-five Packages in a Case

Small Package—All Sizes Listed Above.....\$0.50

Twelve in a Display Carton; 144 in a Case

CHEESE CLOTH

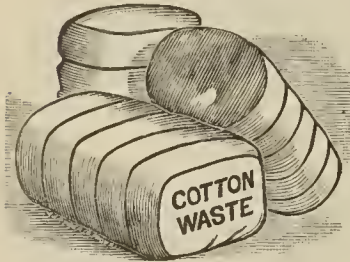
A bleached cloth very absorbent for polishing and wiping.

Each

5 Yard Packages..\$0.30
1 Pound Rolls75
Wrapped in cellophane.



COTTON WASTE



IN BALES

All material used in manufacturing this waste is procured from mills selected as producers of particular yarns and cloth. Carefully hand picked, graded, to extract extraneous matter.

| White | Per Lb. | Colored | Per Lb. |
|----------------|---------|---------|---------|
| Extra Machined | \$0.25 | No. 1 | \$0.15 |
| 3X No. 2 | .20 | No. 2 | .10 |

Prices Upon Application

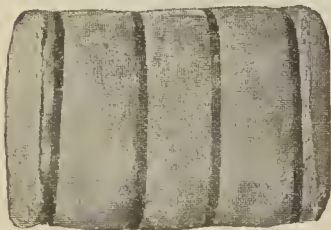
KLEEN WIPE

Adapted for use on motorboats, automobiles, or wherever a small amount of waste is required. Made of clean, long absorbent threads thoroughly machined



Kleenwipe—Weight Each, 1 Pound.....**\$0.30**

WIPING RAGS



Used as a substitute for waste in all general cleaning; all pieces are regular hand size. Selected woven muslin, free from hooks and buttons; washed and sterilized.

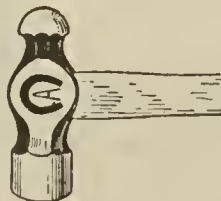
In one hundred pound burlap bales.

| No. | Weight Each, 1 Pound |
|---------------|----------------------|
| No. 1—White | \$0.25 |
| No. 2—Colored | .15 |

MACHINISTS HAMMERS

ATHA—BALL PEIN

Solid forged, at uniform heat, of high grade tool steel; octagon pattern; pein and head hardened for machinist work; balanced so greater weight is toward the head; tightly fitted second growth hickory handles.



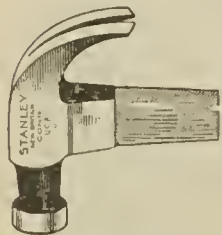
| Nos. | Size Nos. | Weight Head, Ounces | Length Overall, Inches | Weight per Dozen, Lbs. | Each |
|------|-----------|---------------------|------------------------|------------------------|---------------|
| 308 | 3/0 | 8 | 13 | 10 | \$1.14 |
| 309 | 2/0 | 12 | 14 | 13 | 1.14 |
| 310 | 0 | 16 | 14½ | 16½ | 1.19 |
| 311 | 1 | 20 | 15 | 20½ | 1.28 |
| 312 | 2 | 24 | 16 | 23½ | 1.41 |
| 313 | 3 | 28 | 16 | 26½ | 1.50 |
| 314 | 4 | 32 | 16 | 30 | 1.58 |

NAIL HAMMERS

STANLEY
No. 12

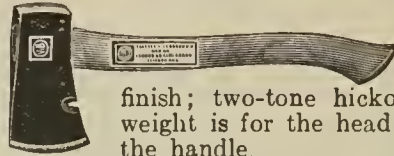
ADZE EYE—BELL FACE

Made of a special steel carefully forged, hardened and tempered. Adze eye; bell face; round neck and poll; polished finish; handle of second growth white hickory. Claws so designed that pulling strain comes on the body rather than on the edge of the claw.



| Size, Nos. | Weight of Head, Ounces | Length Overall, Inches | No. in a Box | Weight Each Handled, Lbs. | Each |
|------------|------------------------|------------------------|--------------|---------------------------|---------------|
| 4 | 5 | 12 | 4 | ½ | \$1.48 |
| 3 | 7 | 12 | 4 | ¾ | 1.48 |
| 2½ | 10 | 13 | 4 | 1⅛ | 1.48 |
| 2 | 13 | 13 | 4 | 1¼ | 1.52 |
| 1½ | 16 | 13 | 4 | 1½ | 1.56 |
| 1 | 20 | 13½ | 4 | 1¾ | 1.60 |

LIFEBOAT AXES



Drop forged from high quality tool steel; well tempered; black forge finish; two-tone hickory handle, well balanced; weight is for the head only and does not include the handle.

Each
Size No. 0—Weight Each, 1¼ Lbs.....**\$1.55**

FIRE AXES

UNDERHILL

First quality tool steel, hand tempered; hardened pick-point; poll and handle painted red; pick-point and blade polished; 36 inch hickory handle.

Each
Underhill—Weight of Head, 5 Lbs.; Weight Each, 6¾ Lbs..**\$4.05**



AXE BRACKETS



For supporting firemen's axes; attached to the wall or bulkhead.

Made of wrought brass; polished finish.

Per Dozen Polished
No. 2—Width of Sheath, 6 Inches; Weight per Dozen Sets, 5 Lbs.**\$8.00**
Handle Support Only **4.00**

Twelve in a Box

SHIP ADZES

WHITE
LIPPED SHIP
No. 45

Best crucible steel blade with soft steel eye; carefully tempered; non-rusting finish.

| Size Cut, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------------------|------------------------|----------------|
| 4 | 33 | \$71.60 |
| 4¼ | 33 | 71.60 |
| 4½ | 36 | 77.45 |
| 4¾ | 36 | 77.45 |
| 5 | 36 | 83.46 |



CHIPPING HAMMERS



With Handles
Forged from high grade steel; tempered edges; black finish.

Per Dozen
Length, 5 Inches; Width Bit, 1½ Inches; Weight Each, 1 Lb.**\$6.00**

SHIP OR TOP MAULS



High grade forged steel, carefully hardened and tempered to withstand rough usage; the eyes are straight and true, allowing the handle to set square in the tool; faces are machined turned and polished.

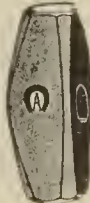
| Weight Each, Lbs. | Length, Inches | Diameter Feet Small | Inches Large | Per Pound |
|-------------------|-----------------|---------------------|-----------------|-----------|
| 4 | 8 $\frac{3}{4}$ | $\frac{3}{8}$ | 1 $\frac{3}{4}$ | \$0.42 |
| 5 | 8 $\frac{3}{4}$ | $\frac{7}{8}$ | 1 $\frac{7}{8}$ | .42 |
| 6 | | $\frac{1}{2}$ | 2 $\frac{1}{8}$ | .42 |

SLEDGES

OREGON OR SHORT PATTERN

No. 760

Forged from high grade steel; hardened and tempered to withstand rough usage; the eyes are straight and true, allowing handle to set square in the tool; faces are machined turned and polished.



| Weight Each, Lbs. | Length, Inches | Diameter Face, Inches | Per Pound |
|-------------------|-----------------|-----------------------|-----------|
| 4 | 4 $\frac{7}{8}$ | 1 $\frac{5}{8}$ | \$0.40 |
| 6 | 5 $\frac{5}{8}$ | 2 | .30 |
| 7 | 5 $\frac{3}{4}$ | 2 | .30 |
| 8 | 6 $\frac{1}{4}$ | 2 | .30 |
| 10 | 6 $\frac{1}{2}$ | 2 $\frac{1}{4}$ | .30 |
| 12 | 6 $\frac{3}{4}$ | 2 $\frac{3}{8}$ | .30 |

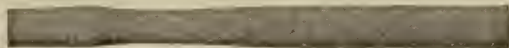
HANDLES



OVAL OR ADZE EYE CARPENTERS HAMMER

Made from highest grade hickory butts, carefully seasoned; uniform quality, nicely finished.

| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | Length, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|------------------------|-----------|----------------|------------------------|-----------|
| 12 | 5 | \$2.45 | 15 | 6 $\frac{3}{4}$ | \$2.45 |
| 13 | 5 $\frac{1}{2}$ | 2.45 | 16 | 7 $\frac{1}{2}$ | 2.80 |
| 14 | 6 $\frac{1}{4}$ | 2.45 | .. | ... | ..... |



MACHINISTS, BLACKSMITHS, RIVETING AND SCALING HAMMER

Made from highest grade hickory butts, carefully seasoned; uniform quality, nicely finished.

| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | Length, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|------------------------|-----------|----------------|------------------------|-----------|
| 12 | 5 | \$2.45 | 18 | 8 $\frac{1}{2}$ | \$3.10 |
| 13 | 5 $\frac{1}{2}$ | 2.45 | 19 | 9 | 3.50 |
| 14 | 6 | 2.45 | 20 | 11 | 3.50 |
| 15 | 6 $\frac{1}{2}$ | 2.45 | 22 | 13 | 3.85 |
| 16 | 7 | 2.80 | 24 | 15 | 4.40 |
| 17 | 7 $\frac{1}{2}$ | 2.80 | .. | .... | ..... |



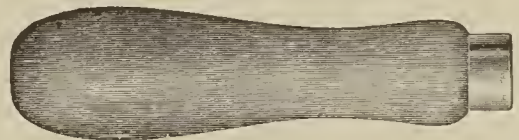
SLEDGE, MAUL OR STRIKING

Made from highest grade hickory butts, carefully seasoned; uniform quality, nicely finished.

| Length, Inches | Extra | Per Dozen No. 1 | No. 2 | Length, Inches | Extra | Per Dozen No. 1 | No. 2 |
|----------------|--------|-----------------|--------|----------------|--------|-----------------|--------|
| 24 | \$5.65 | \$4.75 | \$2.80 | 32 | \$8.55 | \$6.55 | \$4.10 |
| 26 | 7.70 | 5.50 | 3.40 | 34 | 10.35 | 7.80 | 4.70 |
| 28 | 7.70 | 5.50 | 3.40 | 36 | 10.35 | 7.80 | 4.70 |
| 30 | 8.55 | 6.55 | 4.10 | .. | ..... | .... | ..... |

Twenty-four in a Crate

FILE HANDLES



SOFT WOOD

Made of a good grade of soft wood with steel ferrules.

| Nos | Large Diam., Inches | Length, Inches | Size Ferrule, Inches | For Files, Inches | Weight per Gross, Lbs. | Per Gross |
|-----|---------------------|-----------------|----------------------|-------------------|------------------------|-----------|
| 1 | 1 $\frac{3}{8}$ | 5 | $\frac{3}{4}$ | 10-12 | $\frac{3}{4}$ | \$10.00 |
| 2 | 1 $\frac{1}{4}$ | 4 $\frac{3}{4}$ | $\frac{1}{2}$ | 8-10 | $\frac{3}{4}$ | 9.00 |
| 3 | 1 $\frac{1}{8}$ | 4 $\frac{1}{2}$ | $\frac{3}{8}$ | 6-8 | $\frac{7}{8}$ | 7.00 |
| 4 | 1 $\frac{1}{8}$ | 4 $\frac{1}{4}$ | $\frac{1}{2}$ | 4-6 | 1 | 6.00 |

HAND SAWS

ATKINS—SILVER STEEL



No. 54—SHIP POINT PATTERN

A very popular saw. Blade is of silver steel, straight back with damaskeen finish; full taper ground, and specially tempered. Thoroughly seasoned old style handle of selected beech, smoothly finished and varnished and fastened to blade with three nickeled screws and medallion.

| Length Blade, Inches | Style | Points per Inch | Weight per Dozen, Lbs. | Per Dozen |
|----------------------|-------|-----------------|------------------------|-----------|
| 20 | Panel | 10, 11 | 15 | \$36.48 |
| 22 | Panel | 9, 10, 11 | 15 | 41.08 |
| 24 | Panel | 7, 8, 9, 10, 11 | 22 $\frac{1}{2}$ | 43.28 |
| 24 | Rip | 6, 7 | 22 $\frac{1}{2}$ | 43.28 |
| 26 | Hand | 7, 8, 9, 10 | 25 $\frac{1}{2}$ | 45.48 |
| 26 | Rip | 6, 7 | 25 $\frac{1}{2}$ | 51.56 |

Four in a Box

COMPASS SAWS



No. 2—ATKINS

Silver steel blade attached with saw screw and medallion to the carved and

polished applewood handle. Blade has eight points to the inch.

| Length Blade, Inches | Weight per Dozen, Lbs. | Blades Only, per Dozen | Per Dozen |
|----------------------|------------------------|------------------------|-----------|
| 10 | 5 $\frac{1}{4}$ | \$6.52 | \$13.00 |
| 12 | 6 | 6.92 | 13.44 |
| 14 | 6 $\frac{1}{2}$ | 7.64 | 14.24 |
| 16 | 7 | 8.08 | 14.68 |
| 18 | 7 $\frac{1}{4}$ | 8.52 | 15.12 |

Six in a Box

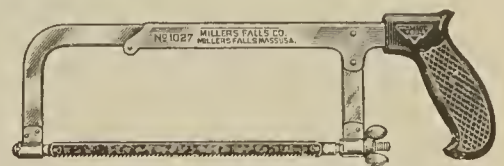
HACK SAW FRAMES

MILLERS FALLS

Adjustable Pistol Grip

Special black composition, handle moulded in one piece and so designed that the entire frame hangs perfectly.

End opposite handle built close to frame, permitting work in close corners. Extra strength in middle of back where greatest strain comes. Blade strained by thumb nut under handle and faceable in four directions. Polished and nickel plated frame. Depth, 3 $\frac{1}{4}$ inches; stock, 1 $\frac{1}{2}$ inch. Complete with one 10-inch blade.



No. 1027—Adjustable for 8 to 12-Inch Blades; Weight Each, 1 $\frac{1}{4}$ Lbs. \$1.75

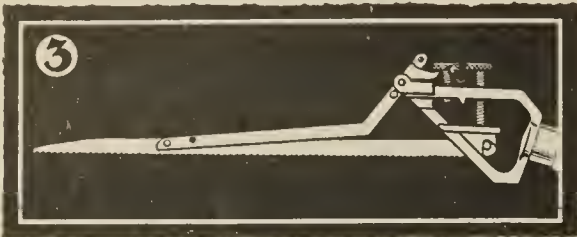
HACK SAW FRAMES



ADJUSTABLE
PLAIN HANDLE

A light, stiff, adjustable frame with sheath back; square stud can be swiveled without removing the stud; blade strained by thumb nut and faceable in four directions; polished and nickel plated steel frame. Depth under back, 2½ inches; size of stock, 3x11 inch; stained hardwood handle. Complete with one ten-inch blade.

No. 78—Adjustable for 8 to 12 Inch Blades; Each
Weight Each, 1 Lb.\$1.10



QUAD—4-IN-1

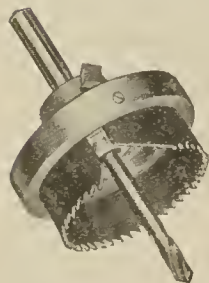
May be adjusted for every conceivable sort of work. Blades are adjustable for various depth cuts and by using a heavy gauge, 12 inch blade as an extension over the end of the frame the saw is enabled to work in places inaccessible to a regular hack saw. Frame takes standard 8-inch blade and furnishes greater tension for rapid cutting. Five blades of special tungsten steel, two 8-inch, 22 teeth; one 8-inch, 32 teeth and one 12-inch, 32 teeth, heavy blade for extension metal cutting supplied with each frame.

Quad 4-in-1—Weight Each, 1½ Lbs.\$2.50
One in a Carton

EXTRA BLADES

8-Inch—22 or 32 Teeth Per Dozen \$2.00
12-Inch—32 Teeth 2.00

ROTARY HACK SAWS



MISENER

Cuts clean, finished round holes in steel, sheet metals, cast iron, slate, wood, plaster, bakelite and any other material a hack saw will cut. Marble, tile and porcelains may also be cut by using abrasives. Furnished regularly with bit stock for brace use but can be supplied with round straight power shank or No. 1 Morse taper shank at an additional small cost. Furnished with a set of blades that cut up to ¾ inch thick material in actual diameters from ¾ to 2¼ inches in diameter, (7 sizes) by ¼ inch variation.

No. 3X—Weight Each, 1¾ Lbs. Per Set \$10.40

Note—Extra for round power shank for electric or post drill use, \$0.75. For Morse taper shank, extra, \$1.00. Illustration shows saw with round power shank.

No. B1—Cuts Actual Diameters from 1 to 3½ Inches by ¼ Inch Variations, all Material up to ¾ Inch Thick. (11 Cutters).....\$17.65

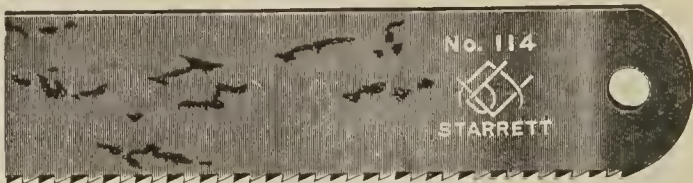
Extra for round power or Morse taper shanks, \$1.75.

No. B4—Cuts Outside Diameters of Iron Pipe or Conduit from ½ to 2 Inch. Openings Are Just Right to Allow Pipe to Slip Cutters Through. With Set of Blades ½ Inch Deep.....\$7.75
Round or Straight Power Shank75

Note—A ratchet handle can be furnished for the No. B1 rotary Hack Saw for \$3.00. Separate renewal blades can be furnished at small cost.

Note—Rotary cutters can be furnished to cut out all sizes of portlights. Prices upon application.

HACK SAW BLADES



STARRETT—ALL HARD BLADES

Made from Tungsten steel, electrically heat treated; the teeth are set evenly and have square cutting points; set is just enough to insure a free, smooth and rapid cut, removing no more stock than necessary.

No. 103—FOR HAND FRAMES

For all solids, tool steels, wrought iron, cast iron and slate; eighteen teeth to the inch; .025 inch thick.

| Lgth, Inches | Width, Inch | Weight per Gross, Lbs. | Per Gross | Length, Inches | Width, Inch | Weight per Gross, Lbs. | Per Gross |
|--------------|-------------|------------------------|-----------|----------------|-------------|------------------------|-----------|
| 8 | 7/16 | 3 7/8 | \$8.00 | 12 | 1/2 | 6 1/4 | \$12.00 |
| 10 | 1/2 | 5 1/8 | 10.00 | .. | .. | .. | .. |

Seventy-two in a Box

No. 114—FOR POWER MACHINES

Especially adapted for all work in light or medium power machines; fourteen teeth to the inch; ¾ inch wide; .032 inch thick.

| Length, Inches | Weight per Gross, Lb. | Per Gross |
|----------------|-----------------------|-----------|
| 12 | 12 3/4 | \$19.44 |

Seventy-two in a Box

No. 255

ALL HARD BLADES—FOR POWER MACHINES

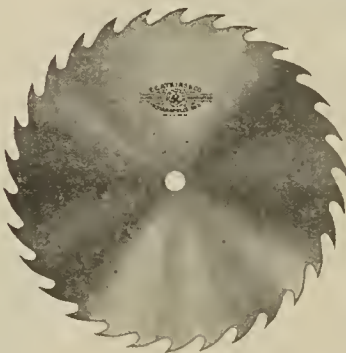
Especially adapted for cutting high speed steel, tool steel and cast iron in high speed power machines; fourteen teeth to the inch; ¾ inch wide; .049 inch thick.

| Length, Inches | Weight per Gross, Lb. | Per Gross | Length, Inches | Weight per Gross, Lbs | Per Gross |
|----------------|-----------------------|-----------|----------------|-----------------------|-----------|
| 12 | 18 1/4 | \$28.92 | 14 | 20 1/4 | \$33.12 |

Forty-Eight in a Box

SOLID TOOTH CIRCULAR SAWS

ATKINS—SILVER STEEL



Made of silver steel, a special high grade crucible steel which is tempered scientifically through the use of devices which reduce the hardening and tempering processes to an absolute certainty. They are easy to file, but at the same time are exceedingly hard and tough, take a perfect swage and do not lose their points quickly. All saws filed and set, ready for use.

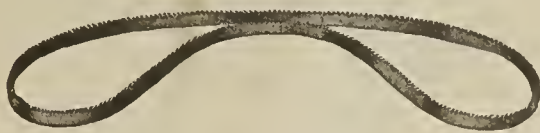
PATENT GROUND AND TEMPERED

| Diam., Inches | Thickness Gauge | Size Hole, Inches | Weight Each, Lbs. | Each | Extra for Each Gauge Heavier | Beveling New Saws Per Gauge |
|---------------|-----------------|-------------------|-------------------|--------|------------------------------|-----------------------------|
| 6 | 18 | 3/4 | 3/4 | \$3.30 | \$0.07 | \$0.25 |
| 8 | 18 | 7/8 | 1 | 4.40 | .10 | .35 |
| 10 | 16 | 1 | 1 1/2 | 5.60 | .20 | .45 |
| 12 | 15 | 1 | 2 1/2 | 7.00 | .30 | .55 |
| 14 | 14 | 1 1/8 | 3 1/2 | 8.50 | .40 | .65 |
| 16 | 14 | 1 1/8 | 4 1/2 | 10.50 | .50 | .75 |
| 18 | 13 | 1 1/4 | 6 | 12.50 | .60 | .90 |

Bone, horn, and ivory saws, add 50 per cent to above list. No extra charge for fitting. When these saws are hollow ground or beveled, the 50 per cent advance is to apply only on the list price of a straight gauge saw and not to the extras for hollow grinding or beveling.

BAND SAWS

ATKINS



NARROW

For Re-Sawing and Scroll Work

| Width, Inches | Standard Gauge | Points per Inch | Weight per Foot, Lbs. | Per Foot | For Braising Add |
|---------------|----------------|-----------------|-----------------------|----------|------------------|
| 1/8 | 23 | 8 | 1.05 | \$0.13 | .... |
| 1/8 | 23 | 7 | 1.57 | .13 | .... |
| 1/4 | 22 | 6 | 2.35 | .13 | \$0.50 |
| 3/8 | 22 | 5 1/2 | 3.52 | .14 | .50 |
| 1/2 | 21 | 5 | 5.36 | .15 | .50 |
| 5/8 | 21 | 4 1/2 | 6.70 | .16 | .60 |
| 3/4 | 21 | 4 | 8.05 | .18 | .60 |
| 7/8 | 21 | 4 | 9.39 | .20 | .60 |
| 1 | 20 | 3 1/2 | 11.75 | .22 | .70 |
| 1 1/8 | 20 | 3 1/2 | 13.16 | .24 | .70 |
| 1 1/4 | 20 | 3 1/2 | 14.71 | .26 | .70 |
| 1 3/8 | 20 | 3 | 16.08 | .28 | .80 |
| 1 1/2 | 20 | 3 | 17.63 | .32 | .80 |
| 1 3/4 | 20 | 3 | 20.57 | .38 | .80 |

Prices include setting and filing. Saws with beveled backs take advance in list of 50 per cent first gauge and 10 per cent for each additional gauge. For saws with knife edge add \$0.10 per foot to list. Saw can be furnished in coils, any length. Band saws for cutting bone, ivory, fibre, meat, brass, and soft metals, also "B" tooth metal band saws for cutting thin metal, sheeting, etc., take advance in list of 25 per cent above narrow band. Not brazed.



SILVER SOLDER

FOR BAND SAWS

The successful brazing of band saws depends largely on the solder used; this solder has proven to be the best adapted for brazing tempered steel.

Furnished only in one ounce rolls.

| Width, Inch | Per Ounce | Width, Inches | Per Ounce |
|-------------|-----------|---------------|-----------|
| 1/2 | \$.... | 7/8 | \$.... |
| 5/8 | | 1 1/4 | .... |
| 3/4 | | ... | |

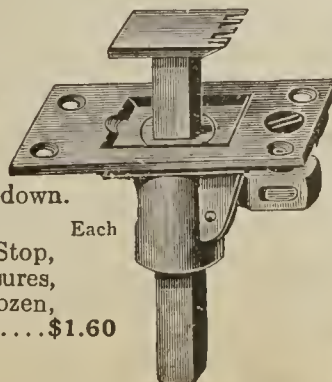
Prices Upon Application

BENCH STOPS

MORRILL—PERFECT

Made of semi and wrought steel; solid steel head, adjustable and reversible; is sunk into the work bench so as to be flush when not in use and requires a 5/8-inch hole for rod to work up and down.

Each



No. 1—Face, 3 1/2x2 Inches; Stop, 1 1/4 Inches Square; Box Measures, 8x5.5x3 Inches; Weight per Dozen, 10 1/2 Lbs. \$1.60

Six in a Box

IRON BENCH PLANES

BAILEY—ADJUSTABLE



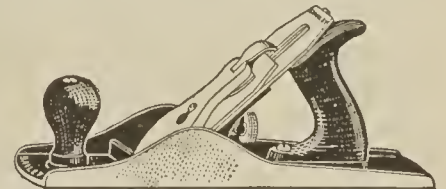
Japanned cast iron frames; varnished rosewood knobs and handles; polished steel caps. The tempered and polished tool steel cutters are adjustable endwise by a screw and sidewise by a lever. With plain bottoms.

| Nos. | Style Plane | Length, Inches | Width Cutter, Inches | Weight Each, Lbs. | Each |
|------|-------------|----------------|----------------------|-------------------|--------|
| 3 | Smooth | 8 | 1 3/4 | 3 1/8 | \$4.80 |
| 4 | Smooth | 9 | 2 | 3 3/4 | 5.25 |

JACK

Iron jack, planes furnished with plain bottoms.

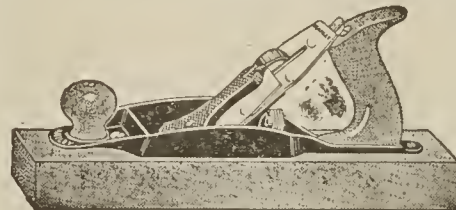
Japanned cast iron frame; varnished rosewood knob and handle; polished steel cap. The tempered and polished tool steel cutter is adjustable endwise by a screw and sidewise by a lever.



No. 5—Length, 14 Inches; Width of Plate, 2 Inches; Weight Each, 4 3/4 Lbs. \$5.00

WOOD BOTTOM PLANES

BAILEY—ADJUSTABLE

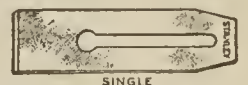


Superior quality wood jack and jointer planes with bottoms, knobs and handles made from selected, well-seasoned beech. A lever and a screw provide both endwise and sidewise adjustment of the cutters. Japanned cast iron fittings; tempered and polished tool steel cutters.

| Nos. | Style Plane | Length, Inches | Width Cutter, Inches | Weight Each, Lbs. | Each |
|------|-------------|----------------|----------------------|-------------------|--------|
| 26 | Jack | 15 | 2 | 3 3/4 | \$3.70 |
| 31 | Jointer | 24 | 2 3/8 | 6 1/2 | 5.05 |

All Above, One in a Box

PLANE IRONS



Single and double irons for both wood bottom and iron planes. Cutting widths from 1 5/8 to 2 5/8 inches.

Prices on Application

ELECTRIC HAND PLANES

ALTA



Adjustable and accurate. Operates from any 110 volt, 60 cycle or less light socket. Planes material to 2 1/2 inches wide and is adjustable for any depth cut to 1/8 inch. Convenient, when

inverted, for use as a bench jointer. Handy as a jack plane. All aluminum frame; enclosed, grease lubricated, accurately cut gears; cutter shaft mounted on dust-proof ball bearings. Finger tip control. Has beveling fence for cutting bevels up to 45 degrees. Quick re-setting from square to bevel cut. Safety friction gear on cutter shaft eliminates possibility of motor damage through sudden shocks or other overload. With ten feet of heavy 2 or 3 conductor cable, and armored plug.

Each

Alta Plane—Length, 18 In.;, Weight Ea., 18 Lbs. \$200.00

Note—Can be furnished also with 230 volt motor. Price upon application.

CAULKING IRONS



CAULKING OR MAKING IRONS
Made from drop forged tool steel
ground edge; bright steel finish.

| Nos. | Thickness, Inch | Length, Inches | Weight per Dozen, Lbs. | Per Dozen | |
|------|--------------------|-------------------|---------------------------|-----------|----------------------|
| | | | | Regular | Carvers 1st Grade |
| 0 | 1/8 | 5 7/8 | 4 5/8 | \$11.50 | \$32.00 |
| 1 | 1/8 | 6 3/8 | 5 1/2 | 12.00 | 33.00 |
| 2 | 3/8 | 5 7/8 | 5 3/4 | 12.00 | 34.00 |
| 3 | 1/4 | 6 | 7 1/2 | 12.50 | 35.20 |

Note—No. 0 is a plain caulking iron; Nos. 1, 2 and 3 identifies the number of creases or thickness.

DECK OR DUMB IRONS

Made from drop forged tool steel
ground edge; bright steel finish.



| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | |
|-------------------|---------------------------|-----------|--------------------|
| | | Regular | Carvers, 1st Grade |
| 6 1/8 | 7 3/8 | \$13.00 | \$36.00 |



CROOKED OR BENT IRONS

Made of drop forged steel
ground edge; bright steel finish.

| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | |
|-------------------|---------------------------|-----------|--------------------|
| | | Regular | Carvers, 1st Grade |
| 6 3/4 | 7 1/4 | \$13.00 | \$40.00 |

SPIKE

Made of drop forged tool steel
ground edge; bright steel finish.



| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | |
|-------------------|---------------------------|-----------|--------------------|
| | | Regular | Carvers, 1st Grade |
| 8 1/8 | 6 1/8 | \$12.00 | \$32.00 |



REEFING IRONS

Also known as clearing
irons, made of drop forged

tool steel ground edge; bright steel finish.

| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | |
|-------------------|---------------------------|-----------|-------------------|
| | | Regular | Carvers 1st Grade |
| 9 1/2 | 6 1/2 | \$15.00 | \$32.00 |

KLONDIKE

Made of drop forged tool steel ground edge; bright steel
finish.

| Size, Nos. | Thickness, Inch | Length, Inches | Weight per Dozen, Lbs. | Per Dozen |
|---------------|--------------------|-------------------|---------------------------|-----------|
| | | | | |
| 00 | 3/4 | 5 | 3 5/8 | \$7.00 |
| 0 | 1/8 | 5 5/8 | 4 3/8 | 7.00 |
| 1 | 1/8 | 5 7/8 | 5 3/8 | 7.25 |

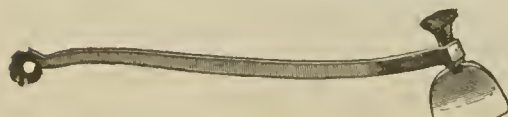
CAULKING MALLETS

Head is made of well seasoned
straight grained wood, ends protected
by strong, wide and two narrow steel
bands at handle hole; handle made of
selected hickory. Size 15x1 7/8 or 1 3/4
inches.



| Nos. | Description | Weight per Dozen, Lbs. | Per Dozen |
|---------------|--------------------------------------|---------------------------|--------------|
| | | | |
| 000 | Best Live Oak, Tempered Steel Rings | 37 | \$56.25 |
| 1 | Live Oak, Polished Steel Rings | 36 | 45.00 |
| 5 | Live Oak, Polished Iron Rings | 34 | 33.75 |
| 8 | White Oak, Polished Steel Rings | 30 | 25.00 |
| 20 | Black Mesquite, Tempered Steel Rings | 42 | 56.25 |
| 30 | Red Wood, Tempered Steel Rings | 40 | 90.00 |
| Boat Builders | | | |
| 40 | Live Oak, Steel Rings | 30 | 37.50 |
| 50 | Black Mesquite, Steel Rings | 31 | 41.28 |

HAWSING IRONS



Made of solid
steel, furnished
straight; black
blade.

| Thick., Inch | Weight Each, Lbs. | Black, Each | Thick., Inch | Weight Each, Lbs. | Black Each |
|-----------------|----------------------|----------------|-----------------|----------------------|---------------|
| 3/16 | 4 11/16 | \$3.50 | 1/8 | 4 7/8 | \$4.00 |
| 1/4 | 4 13/16 | 3.50 | 3/8 | 5 | 4.00 |

BOAT SCRAPERS

OVAL OR TRIANGULAR BLADE

Made with an oval or triangular
tempered steel blade, held to shank
by a nut; hardwood handle with a
black japanned finish; length over-
all, 5 inches.



| Style | Size Blade, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------------|-----------------------|---------------------------|-----------|
| | | | |
| Oval | 2 1/4 x 1 | 2 1/2 | \$6.25 |
| Triangular | 2 x 2 | 2 1/2 | 6.25 |

Twelve in a Box

YACHT SCRAPERS

Made with a triangular
shaped, tempered steel
blade, held to shank by a
nut; hardwood handle.



Yacht Scrapers—Size of Blade, 2 3/4 x 2 3/4 Inches;
Length Overall, 9 1/2 Ins.; Weight per Doz., 5 Lbs. \$10.00
Twelve in a Box

SHIP SCRAPERS



REGULAR PATTERN

Has a tempered steel curved, triangular shape; blade
attached to galvanized socket by a nut; polished hardwood
handle.

| Nos. | Size Blade, Inches | Length Over- all, Inches | Weight Each, Lbs. | Each |
|------|-----------------------|-----------------------------|----------------------|--------|
| | | | | |
| 1 | 1/4 x 4 1/2 | 17 1/2 | 1 5/8 | \$1.40 |
| 2 | 1/8 x 4 1/2 | 17 1/2 | 1 1/8 | 1.30 |

EXTRA BLADES

| For Scraper, Nos. | Size Blade, Inches | Weight Each, Ounces | Each |
|----------------------|-----------------------|------------------------|--------|
| | | | |
| 1 | 1/4 x 4 1/2 | 12 | \$0.60 |
| 2 | 1/8 x 4 1/2 | 6 | .48 |

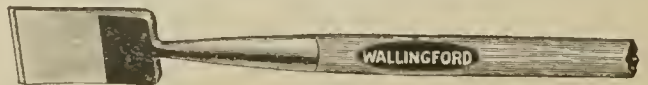


EXTRA HEAVY PATTERN

Has a triangular, crucible tool steel blade, which is at-
tached to shank by a nut; hickory handle; polished blade.

No. 52A—Size of Blade, 6x6 Inches; Length Over-
all, 18 Inches; Weight per Dozen, 2 1/4 Lbs. \$32.00
Note—Can be furnished to order with handles 1 foot long
without extra charge.

DECK SCRAPERS



Solid steel, extra heavy blade; socket welded pattern
one-third polished, balance enamel finish; 4-foot polished
hardwood handle, waxed.

No. IC—Size Blade, 3 1/4 Inches Wide; 6 1/4 Inches
Deep; Weight Each, 4 1/4 Lbs. \$2.25

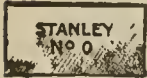
FILE SCRAPERS



Made as the old file scrapers
much used by boatmen.

No. 510—Length, 15 Inches; Width of Blade,
1 3/4 Inches; Weight Each, 1 Lb. \$0.25

HAND SCRAPERS



No. 0—STANLEY

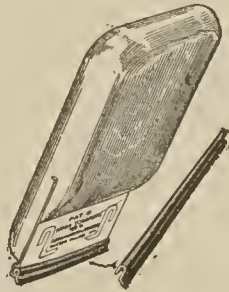
High-grade English tool steel; tempered and hardened, full polished.

| Nos. | Size, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|--------------|------------------------|-----------|
| 0A | 2 1/2 x 5 | 2 | \$7.60 |
| 0B | 3 x 4 | 2 | 7.50 |
| 0D | 3 x 5 | 2 1/2 | 8.10 |
| 0E | 3 x 6 | 3 | 9.40 |
| 0H | 3 1/2 x 6 | 4 | 10.20 |

Six in a Box

HOOK SCRAPERS

Fast, easy cutting hand scraper. The only type of scraper with pre-formed, sharpened, removable, Swedish spring steel cutter. Easily sharpened with a file or worm cutter, can be removed with aid of a pliers or driven out with new cutter.



No. 25—Wgt. Ea., 2 Ozs. \$0.50

Twelve in a Carton

Extra Cutters No. 2515



DOUBLE END

With removable, quick cutting cutters that can be re-sharpened easily or replaced with new cutters and pistol grip. One end has curved cutter 2 1/2 inches wide for rough or fast scraping. Other end has curved cutter for fine scraping. 3 1/4 inches wide. One in a carton.

No. 3425—Wgt. Ea., 3/4 Lb. \$2.00

EXTRA CUTTERS

No. 34—Long Cutter \$0.18
No. 25—Short Cutter15

PLUG CUTTERS



No. 140

This is a free, easy cutting tool suitable for use in all kinds of wood. Shank 1/2 inch diameter for use in drill press.

| | Each |
|----------------|--------|
| 3/8 Inch | \$8.00 |
| 1/2 Inch | 8.00 |
| 5/8 Inch | 8.00 |

COUNTERBORES



WOOD

Especially useful for boat builders and cabinet makers or any work which requires the use of a bung or plug over the fastening. Made with 1/4 inch round shank for use in electric or breast drills. The plug cutter is of the extension lip type; the adjustable depth plug stop has a chip way allowing chips a free exit; fastening or center drill is regulation straight shank drill that is removable and adjustable as to depth. Tool steel construction.

| Size Plug, Inch | Uses Drill No. | Weight Each, Ozs. | Each |
|-----------------|----------------|-------------------|--------|
| 3/8 | 36 | 1 1/8 | \$3.00 |
| 1/2 | 36 | 1 1/4 | 4.00 |

One in a Box

SCREW DRIVERS



No. 30—TOBIN

Drop forged from one piece of special analysis steel; special attention is given to temper and uniform thickness of bit; has smooth finished riveted handle.

| Lgth. Blade, Overall, Inches | Length, per Doz., Lbs. | Per Dozen | Length Blade, Overall, Inches | Length, per Doz., Lbs. | Per Dozen |
|------------------------------|------------------------|-----------|-------------------------------|------------------------|-----------|
| 2 | 5 3/4 | 2 1/4 | 7 | 12 5/8 | 7 1/2 |
| 3 | 6 3/4 | 2 1/2 | 8 | 14 5/8 | 10 1/2 |
| 4 | 8 3/4 | 4 1/4 | 10 | 16 5/8 | 11 1/2 |
| 5 | 9 3/4 | 4 3/4 | 12 | 18 5/8 | 12 1/2 |
| 6 | 11 5/8 | 7 | .. | .... | .... |



LONG SERVICE—SQUARE BLADE

These screwdrivers are strongly made from specially treated stock. Handles are of good size, carefully fitted and will not turn on blade. The hardest screw will not harm the blades which are hardened the full length. Made of square steel, permitting the use of wrench for starting or tightening stubborn screws.

| Nos. | Stock, Inches | Length Blade, Inches | Per Dozen | Nos. | Stock, Inches | Length Blade, Inches | Per Dozen |
|------|---------------|----------------------|-----------|------|---------------|----------------------|-----------|
| 900 | 1/8 | 1 1/2 | \$3.00 | 906 | 5/16 | 7 | \$9.60 |
| 901 | 3/16 | 3 | 4.80 | 907 | 5/16 | 12 | 10.80 |
| 902 | 3/16 | 8 | 7.20 | 908 | 3/8 | 8 | 12.00 |
| 903 | 1/4 | 4 | 7.20 | 909 | 3/8 | 12 | 13.20 |
| 904 | 1/4 | 6 | 7.80 | 910 | 3/8 | 18 | 14.40 |
| 905 | 1/4 | 9 | 8.40 | ... | .. | .. | .... |

MILLER FALLS
SPIRAL
RATCHET

Nickel plated steel ratchet case; accurately machined steel spiral; hardened tool steel ratchet pawls; manganese bronze spiral nuts; stained and polished hardwood handle. Has spiral action for driving or withdrawing screws; a locking device also makes it a perfectly rigid screw driver. Furnished complete with three different size screw driver blades.

| Nos. | Length Extended, Inches | Length Closed, Inches | Weight Each, Lbs. | Each |
|------|-------------------------|-----------------------|-------------------|--------|
| 67 | 12 5/8 | 9 3/8 | 1/2 | \$2.30 |
| 61 | 20 1/2 | 14 1/4 | 1 | 3.10 |
| 62 | 26 1/4 | 17 1/4 | 1 1/2 | 4.10 |

One in a Box

OFFSET TYPE

Drop Forged
Alloy Steel

A very handy tool for use in places where ordinary Screwdrivers cannot possibly reach. The length of tool gives sufficient leverage to move the most stubborn screws. Points are at right angles and thus by reversing, the user is enabled to catch screw in any position.

| Nos. | Size, Inches | Length, Inches | Bit Size, Inches | Per Dozen |
|------|--------------|----------------|------------------|-----------|
| 1151 | 1/4 | 6 | 5/16 | \$4.80 |
| 1152 | 5/16 | 6 | 3/8 | 5.40 |
| 1153 | 3/8 | 6 | 1/2 | 6.00 |
| 1154 | 1/2 | 8 | 5/8 | 9.00 |

6 Inch and Shorter Packed 12 in a Box; Other Sizes 6 in a Box

Tiebout Marine Hardware is used today in practically all of the famous ship yards for every kind and class of boat and vessel.

COLD CHISELS



No. 1B

Forged from a high grade of tool steel. Point and head highly polished, balance of tool black japanned.

| Width of Bit, Inches | Size of Stock, Inch | Length Over-all, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|----------------------|---------------------|-------------------------|-----------------|------------------------|-----------|
| $\frac{5}{16}$ | $\frac{1}{4}$ | 5 | 12 | $1\frac{1}{8}$ | \$2.40 |
| $\frac{7}{16}$ | $\frac{3}{8}$ | $5\frac{1}{2}$ | 12 | 2 | 2.72 |
| $\frac{1}{2}$ | $\frac{1}{2}$ | 6 | 12 | $3\frac{3}{4}$ | 3.08 |
| $\frac{3}{4}$ | $\frac{5}{8}$ | $6\frac{1}{2}$ | 6 | 6 | 3.68 |
| $\frac{7}{8}$ | $\frac{3}{4}$ | $7\frac{1}{2}$ | 6 | $10\frac{1}{4}$ | 4.48 |
| 1 | $\frac{7}{8}$ | 8 | 6 | $15\frac{1}{2}$ | 6.00 |
| $1\frac{1}{4}$ | 1 | $8\frac{1}{2}$ | 6 | $19\frac{3}{4}$ | 6.80 |

CAPE CHISELS

No. 2B

Forged from a high grade of tool steel. Point and head highly polished, balance of tool black japanned.



| Width of Bit, Inch | Size of Stock, Inch | Length Over-all, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|--------------------|---------------------|-------------------------|-----------------|------------------------|-----------|
| $\frac{1}{4}$ | $\frac{1}{2}$ | 6 | 12 | $3\frac{1}{4}$ | \$5.00 |
| $\frac{5}{16}$ | $\frac{1}{2}$ | 7 | 12 | 4 | 5.16 |
| $\frac{3}{8}$ | $\frac{5}{8}$ | 7 | 6 | $6\frac{1}{4}$ | 5.56 |
| $\frac{1}{2}$ | $\frac{3}{4}$ | $7\frac{1}{2}$ | 6 | $9\frac{1}{4}$ | 6.52 |
| $\frac{5}{8}$ | $\frac{7}{8}$ | 8 | 6 | 13 | 7.84 |
| $\frac{3}{4}$ | 1 | $8\frac{1}{2}$ | 6 | $19\frac{1}{2}$ | 8.64 |

ROUND NOSE CHISELS



No. 3B

Forged from a high grade of tool steel. Point and head highly polished, balance of tool black japanned.

| Width of Point, Inch | Size of Stock, Inch | Length Over-all, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|----------------------|---------------------|-------------------------|-----------------|------------------------|-----------|
| $\frac{1}{4}$ | $\frac{1}{2}$ | 6 | 12 | $3\frac{1}{8}$ | \$3.52 |
| $\frac{5}{16}$ | $\frac{1}{2}$ | 7 | 12 | 4 | 3.68 |
| $\frac{3}{8}$ | $\frac{5}{8}$ | 7 | 6 | 7 | 4.12 |
| $\frac{1}{2}$ | $\frac{3}{4}$ | $7\frac{1}{2}$ | 6 | $9\frac{3}{4}$ | 4.88 |
| $\frac{5}{8}$ | $\frac{7}{8}$ | 8 | 6 | 14 | 5.92 |
| $\frac{3}{4}$ | 1 | $8\frac{1}{2}$ | 6 | $19\frac{1}{2}$ | 7.00 |

DIAMOND POINT CHISELS

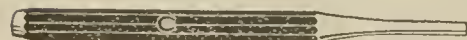
No. 4B

Forged from a high grade of tool steel. Point and head highly polished, balance of tool black japanned.



| Size of Point, Inch | Size of Stock, Inch | Length Over-all, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|---------------------|---------------------|-------------------------|-----------------|------------------------|-----------|
| $\frac{1}{4}$ | $\frac{1}{2}$ | 6 | 12 | $3\frac{1}{2}$ | \$3.68 |
| $\frac{5}{16}$ | $\frac{1}{2}$ | 7 | 12 | $4\frac{1}{2}$ | 3.72 |
| $\frac{3}{8}$ | $\frac{5}{8}$ | 7 | 6 | 7 | 4.40 |
| $\frac{1}{2}$ | $\frac{3}{4}$ | $7\frac{1}{2}$ | 6 | $10\frac{1}{2}$ | 5.32 |
| $\frac{5}{8}$ | $\frac{7}{8}$ | 8 | 6 | $15\frac{1}{2}$ | 6.48 |
| $\frac{3}{4}$ | 1 | $8\frac{1}{2}$ | 6 | $20\frac{1}{2}$ | 7.68 |

MACHINE PUNCHES



No. 6A

Made of a high grade of forged tool steel; have a specially fine finish; the points and heads polished, balance of tool japanned.

| Diam. of Point, Inch | Size of Stock, Inch | Length Over-all, Inches | Number in a Box | Weight per Dozen, Lbs. | Per Dozen |
|----------------------|---------------------|-------------------------|-----------------|------------------------|-----------|
| $\frac{1}{32}$ | $\frac{3}{8}$ | 6 | 12 | $1\frac{3}{4}$ | \$4.12 |
| $\frac{1}{16}$ | $\frac{1}{2}$ | 6 | 12 | 3 | 4.32 |
| $\frac{1}{8}$ | $\frac{1}{2}$ | 6 | 12 | 3 | 4.65 |
| $\frac{1}{4}$ | $\frac{1}{2}$ | 6 | 12 | 3 | 4.65 |
| $\frac{3}{8}$ | $\frac{1}{2}$ | 8 | 12 | $4\frac{1}{4}$ | 4.68 |

PLUG BITS



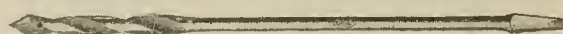
SWAN—DOUBLE SPUR

No. 93

Forged from crucible steel, full polished, except nib. Used by furniture makers, boat builders and others. Length of twist, 2 inches; length overall, $6\frac{1}{2}$ inches.

| Diam. in 16ths of an Inch | Weight per Doz., Lbs. | Per Dozen | Diameter in 16ths of an Inch | Weight per Doz., Lbs. | Per Dozen |
|---------------------------|-----------------------|-----------|------------------------------|-----------------------|-----------|
| 4 | .. | \$6.00 | 13 | $2\frac{1}{4}$ | \$9.95 |
| 5 | .. | 6.00 | 14 | $2\frac{1}{2}$ | 9.95 |
| 6 | .. | 6.00 | 15 | $2\frac{3}{4}$ | 11.40 |
| 7 | .. | 6.00 | 16 | $2\frac{5}{8}$ | 11.40 |
| 8 | .. | 6.00 | 17 | 3 | 14.40 |
| 9 | .. | 6.00 | 18 | $3\frac{1}{2}$ | 14.40 |
| 10 | .. | 7.20 | 20 | 4 | 16.80 |
| 11 | .. | 8.40 | 22 | $5\frac{1}{4}$ | 19.20 |
| 12 | 2 | 8.40 | 24 | $5\frac{1}{2}$ | 21.60 |

BELL HANGERS BITS



W. & B.—No. 109C—WOOD BORING

Long shank bits designed for use of electricians in wiring. Twist is accurate and is long enough to hold a straight course through a long bore.

| Diameter Inches | Length, 12 Inches | Length, 18 Inches | Length, 24 Inches | Length, 30 Inches | Length, 36 Inches |
|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| $\frac{3}{16}$ | \$7.50 | \$10.00 | \$12.50 | \$15.00 | \$17.50 |
| $\frac{1}{4}$ | 8.00 | 10.50 | 13.00 | 15.50 | 18.00 |
| $\frac{5}{16}$ | 8.75 | 11.00 | 13.50 | 16.00 | 18.50 |
| $\frac{3}{8}$ | 9.50 | 12.00 | 14.50 | 17.00 | 19.50 |
| $\frac{7}{16}$ | 10.50 | 13.00 | 15.50 | 18.00 | 20.50 |
| $\frac{1}{2}$ | 12.00 | 14.50 | 17.00 | 19.50 | 22.00 |
| $\frac{9}{16}$ | 13.50 | 16.00 | 18.50 | 21.00 | 23.50 |
| $\frac{5}{8}$ | 15.25 | 17.75 | 20.25 | 22.75 | 25.25 |
| $\frac{11}{16}$ | 17.00 | 19.50 | 22.00 | 24.50 | 27.00 |
| $\frac{3}{4}$ | 19.00 | 21.50 | 24.00 | 26.50 | 29.00 |
| $\frac{13}{16}$ | 21.00 | 23.50 | 26.00 | 28.50 | 31.00 |
| $\frac{7}{8}$ | 23.00 | 25.50 | 28.00 | 30.50 | 33.00 |
| $\frac{15}{16}$ | 25.00 | 27.50 | 30.00 | 32.50 | 35.00 |
| 1 | 27.50 | 30.00 | 32.50 | 35.50 | 38.00 |
| $1\frac{1}{16}$ | 30.50 | 33.00 | 35.50 | 39.00 | 42.00 |
| $1\frac{1}{8}$ | 33.00 | 36.00 | 39.00 | 42.50 | 47.00 |

Note: When ordering specify length and diameter.

AUGER BITS

MILLERS FALLS—FORD



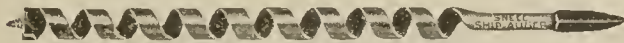
No. 542

Solid center, forged from one piece of tool steel; extension lip, double cutter; cutting edges on extension lips; thoroughly tempered; smooth and easy cutting; for general use and also fine work; highly polished overall; length of twist, $4\frac{1}{2}$ inches; length overall, 9 inches.

| Size in 16ths of an Inch | Weight per Dozen, Lbs. | Per Dozen | Size in 16ths of an Inch | Weight per Dozen, Lbs. | Per Dozen |
|--------------------------|------------------------|-----------|--------------------------|------------------------|-----------|
| 3 | $\frac{3}{4}$ | \$4.80 | 14 | $3\frac{3}{4}$ | \$8.55 |
| 4 | 1 | 4.27 | 15 | $4\frac{1}{16}$ | 9.60 |
| 5 | $1\frac{1}{4}$ | 4.27 | 16 | $4\frac{3}{4}$ | 9.60 |
| 6 | $1\frac{5}{16}$ | 4.27 | 17 | $5\frac{3}{4}$ | 11.20 |
| 7 | $1\frac{3}{8}$ | 4.80 | 18 | $6\frac{7}{8}$ | 11.20 |
| 8 | $1\frac{7}{8}$ | 5.34 | 19 | $7\frac{3}{8}$ | 12.80 |
| 9 | $2\frac{5}{16}$ | 5.87 | 20 | $7\frac{3}{4}$ | 12.80 |
| 10 | $2\frac{5}{8}$ | 6.40 | 21 | $1\frac{1}{4}$ | 14.40 |
| 11 | $2\frac{7}{8}$ | 7.50 | 22 | $8\frac{3}{4}$ | 14.40 |
| 12 | $3\frac{3}{8}$ | 7.50 | 24 | $9\frac{3}{8}$ | 16.01 |
| 13 | $3\frac{7}{16}$ | 8.55 | .. | ... | ..... |

Six in a Box

SHIP AUGERS



No. 541—WITH WORM



No. 542—WITHOUT WORM

SNELLS—IMPROVED

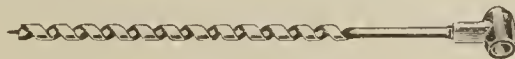
Forged from crucible steel, lacquered hollow polished edge. These augers have been standard with shipbuilders for nearly a century. No. 542 without worm are preferred where very accurate boring is essential as they do not shift off into grain of wood.

| Lengths, 16ths | Overall, Inches | Twist, Inches |
|-------------------|--------------------|------------------|
| 4 to 10 | 14 | 10 |
| 11 to 16 | 16 | 12 |
| 17 to 24 | 18 | 14 |
| 25 to 48 | 20 | 15 |

| Size, 16ths of an Inch | Weight, per Dozen Lbs. | —Per Dozen— No. 541 | No. 542 | Size, 16ths of an Inch | Weight, per Dozen Lbs. | —Per Dozen— No. 541 | No. 542 |
|---------------------------------|---------------------------------|------------------------|---------|---------------------------------|---------------------------------|------------------------|---------|
| 4 | 1 3/8 | \$11.00 | \$13.20 | 27 | 44 | 32.00 | 38.40 |
| 5 | 2 | 11.00 | 13.20 | 28 | 44 | 32.00 | 38.40 |
| 6 | 2 | 11.00 | 13.20 | 29 | 48 | 38.00 | 45.60 |
| 7 | 3 1/2 | 11.00 | 13.20 | 30 | 48 | 38.00 | 45.60 |
| 8 | 3 1/2 | 11.00 | 13.20 | 31 | 54 | 45.00 | 54.00 |
| 9 | 6 | 11.00 | 13.20 | 32 | 54 | 45.00 | 54.00 |
| 10 | 6 | 11.00 | 13.20 | 33 | 59 | 57.00 | 68.40 |
| 11 | 8 1/2 | 12.00 | 14.40 | 34 | 59 | 57.00 | 68.40 |
| 12 | 8 1/2 | 12.00 | 14.40 | 35 | 66 | 72.00 | 86.40 |
| 13 | 12 | 13.00 | 15.60 | 36 | 66 | 72.00 | 86.40 |
| 14 | 12 | 13.00 | 15.60 | 37 | 69 | 86.00 | 103.20 |
| 15 | 14 1/2 | 14.50 | 17.40 | 38 | 69 | 86.00 | 103.20 |
| 16 | 14 1/2 | 14.50 | 17.40 | 39 | 80 | 101.00 | 121.20 |
| 17 | 21 | 16.00 | 19.20 | 40 | 80 | 101.00 | 121.20 |
| 18 | 21 | 16.00 | 19.20 | 41 | 82 | 115.00 | 138.00 |
| 19 | 25 | 18.00 | 21.60 | 42 | 82 | 115.00 | 138.00 |
| 20 | 25 | 18.00 | 21.60 | 43 | 85 | 130.00 | 156.00 |
| 21 | 30 | 20.00 | 24.00 | 44 | 85 | 130.00 | 156.00 |
| 22 | 30 | 20.00 | 24.00 | 45 | 92 | 144.00 | 172.80 |
| 23 | 34 | 23.00 | 27.60 | 46 | 92 | 144.00 | 172.80 |
| 24 | 34 | 23.00 | 27.60 | 47 | 97 | 158.00 | 189.60 |
| 25 | 39 | 27.00 | 32.40 | 48 | 97 | 158.00 | 189.60 |
| 26 | 39 | 27.00 | 32.40 | .. | .. | .. | .. |

Six in a Box up to and Including 1/16 th Size; Three in a Box from 1/16 th to 3/16 th Sizes; one in a Paper from 3/16 th up.

Note—The above are standard lengths; longer lengths can be furnished on special order. Prices upon application.

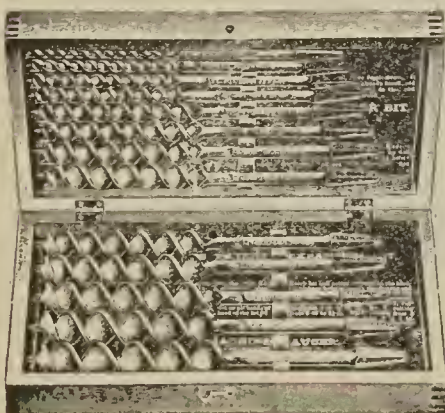


WITH RING

This ring shank as shown in the above illustration can be furnished on either the No. 912 or No. 812 ship auger. Ring is cast and firmly riveted to the shank of auger.

Prices on Application

AUGER BIT SETS



SWAN

Set contains thirteen, cast steel No. 10 Swan auger bits, one each from size 4/16 to 16/16 inch by sixteenths. Packed in a finished hardwood box fitted with adjustable spring racks to hold bits securely in place. A neat convenient set for boat builders' use.

Per Set

No. 1132 1/2—Weight per Set, 3 3/4 Lbs. \$6.00

LOCK JOINT CALIPERS

STARRETT

No. 39—INSIDE



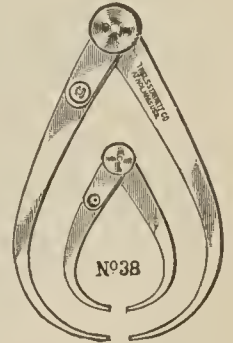
These instruments can be instantly adjusted to their full extent, locked firm in the joint and yet provide a sensitive adjustment. A spring washer under the disc maintains easy friction when joint is unlocked. The slotted short arm provides sensitive adjustment.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 4 | \$1.10 | 14 | \$2.40 |
| 5 | 1.15 | 16 | 2.70 |
| 6 | 1.20 | 18 | 3.00 |
| 8 | 1.50 | 20 | 3.30 |
| 10 | 1.80 | 24 | 4.20 |
| 12 | 2.10 | .. | ... |

No. 38—OUTSIDE

Same construction as the No. 39 Inside Calipers described above. A stiff spring in the slot of the short arm of both of these calipers takes up all backlash.

| Size, Inches | Each | Size, Inches | Each |
|--------------|--------|--------------|--------|
| 4 | \$1.10 | 14 | \$2.40 |
| 5 | 1.15 | 16 | 2.70 |
| 6 | 1.20 | 18 | 3.00 |
| 8 | 1.50 | 20 | 3.30 |
| 10 | 1.80 | 24 | 4.20 |
| 12 | 2.10 | .. | ... |



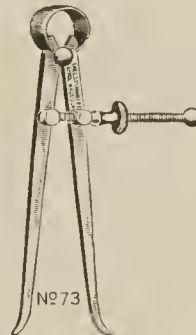
CALIPERS

STARRETT

No. 73—YANKEE—INSIDE

Made of flat stock and nicely finished. Stiff spring bow. Can be used as inside transfer calipers. Furnished with either solid nut or quick-adjusting spring nut.

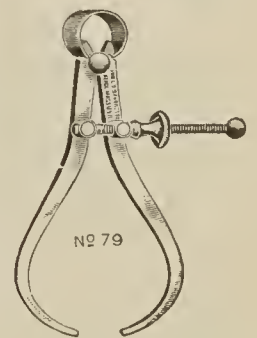
| Size, Inches | Spring Nut, Each | Solid Nut, Each | Size, Inches | Spring Nut, Each | Solid Nut, Each |
|--------------|------------------|-----------------|--------------|------------------|-----------------|
| 2 1/2 | \$1.00 | \$0.80 | 6 | \$1.20 | \$1.05 |
| 3 | 1.05 | .85 | 8 | 1.40 | 1.20 |
| 4 | 1.10 | .90 | 10 | 1.80 | 1.65 |
| 5 | 1.15 | 1.00 | 12 | 2.00 | 1.80 |



No. 79—YANKEE—OUTSIDE

Made of flat stock of lighter pattern than the Fay caliper. They are nicely finished and reliable. Stiff spring bow. Furnished with either solid nut or quick-adjusting spring nut.

| Size, Inches | Spring Nut, Each | Solid Nut, Each | Size, Inches | Spring Nut, Each | Solid Nut, Each |
|--------------|------------------|-----------------|--------------|------------------|-----------------|
| 2 1/2 | \$1.00 | \$0.80 | 6 | \$1.20 | \$1.05 |
| 3 | 1.05 | .85 | 8 | 1.40 | 1.20 |
| 4 | 1.10 | .90 | 10 | 1.80 | 1.65 |
| 5 | 1.15 | 1.00 | 12 | 2.00 | 1.80 |



SPRING DIVIDERS

STARRETT—No. 83—YANKEE

Made of best steel finely finished. Can be furnished with spring or solid nut, as desired.

| Size, Inches | With Spring Nut, Each | With Solid Nut, Each | Size, Inches | With Spring Nut, Each | With Solid Nut, Each |
|--------------|-----------------------|----------------------|--------------|-----------------------|----------------------|
| 2 1/2 | \$1.00 | \$0.80 | 6 | \$1.20 | \$1.05 |
| 3 | 1.05 | .85 | 8 | 1.50 | 1.35 |
| 4 | 1.10 | .90 | 10 | 1.80 | 1.65 |
| 5 | 1.15 | 1.00 | 12 | 2.00 | 1.80 |

Sent with solid nut unless otherwise ordered.



All Above, Three in a Box

Note—We carry in stock a full line of Starrett Tools.

LUFKIN MEASURING TAPES AND RULES

CRESCENT TAPE-RULES



Blade of super-quality tempered steel, stiffened by special forming. For perpendicular or horizontal measurements and for measuring angles, curves, circles, or any shaped objects. Blade has dark markings. End hook adjusts itself to either an end or a hook measurement.

No. 696—72-Inch. Marked Consecutive Inches to 16ths. Price Each\$3.00

Packing: One in a Box, Six in a Carton

UNIVERSAL STEEL TAPES

Standard weight steel tape, clearly marked.

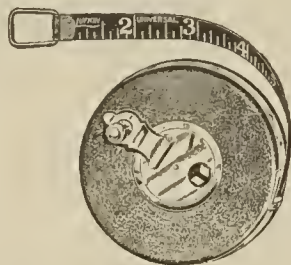
Tan colored imitation leather case. Folding flush handle opened by push pin. Nickel plated trimmings.

THREE-EIGHTHS INCH TAPES

Marked feet and inches one side only.

| | | | | |
|--------------------|--------|--------|--------|--------|
| No. | 540 | 543 | 545 | 546 |
| Length, Feet | 25 | 50 | 75 | 100 |
| Wt. each ozs. | 6 | 10 | 15 | 17 |
| Price, each | \$2.60 | \$2.90 | \$4.00 | \$5.00 |

Packing: One in a Box



OIL GAUGERS STEEL TAPES



For gauging the lighter crude oils, gasoline, etc. Standard weight steel tape fitted with No. 588, 6 oz. solid brass plumb bob, 1 1/4 inches in diameter. Length of bob, 2 3/8 inches is included in measurement of tape. Measurements guaranteed accurate.

THREE-EIGHTHS INCH TAPES

Marked Feet, Inches and 8ths, One Side Only

| Nos. | Length, Feet | Weight, Lbs. | Price, Each |
|------------------------|--------------|--------------|-------------|
| 281—With 588 Plumb Bob | 33 | 1 1/2 | \$7.70 |
| 283—With 588 Plumb Bob | 50 | 1 5/8 | 9.25 |

Packing: One in a Box

ATLAS OIL GAUGERS STEEL TAPES

Designed exclusively for tank gauging.

One-half inch wide heavy steel line. Metal case-hardened frame, with lock handle. Solid brass plumb bob is round with tapered point, is 6 3/4 inches long, 1 inch in diameter and weighs 20 ounces. Bob is included in measurement of tape. Measurements guaranteed accurate.

WITH HEAVY, ONE-HALF INCH TAPES
Marked Feet, Inches and 8th, One Side Only

| Nos. | Length, Feet | Weight, Lbs. | Price, Each |
|--------------------------|--------------|--------------|-------------|
| 129 S—With 590 Plumb Bob | 33 | 2 3/4 | \$13.20 |
| 1293S—With 590 Plumb Bob | 50 | 3 3/4 | 15.10 |

Packing: One in a Box

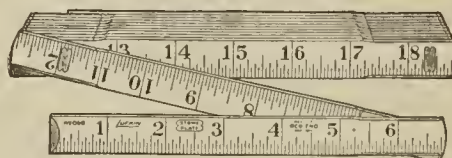


RED END RULES

STRIKE PLATES—LOCK JOINTS

SOLID BRASS TRIMMINGS

Six Inch Folds—5/8 Inch Wide



Gloss enamel finish which will not crack, chip or blister. All ends gloss red. Rustproof throughout.

Marked consecutive inches to 16ths, both sides.

CREAM ENAMELED

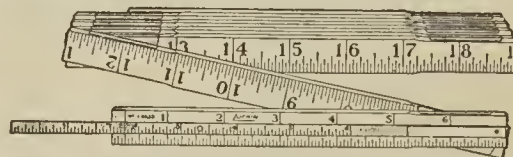
| Nos. | Length, Feet | Weight, per Doz. Lbs. | Per Dozen |
|------|--------------|-----------------------|-----------|
| 054 | 4 | 2 | \$6.00 |
| 055 | 5 | 2 1/2 | 7.20 |
| 056 | 6 | 3 | 8.40 |

WHITE ENAMELED

| Nos. | Length, Feet | Weight, per Doz. Lbs. | Per Dozen |
|------|--------------|-----------------------|-----------|
| 064 | 4 | 2 | \$6.60 |
| 065 | 5 | 2 1/2 | 7.80 |
| 066 | 6 | 3 | 9.00 |

Packing: 1/2 Doz. in a Box

BOXWOOD EXTENSION RULES



Designed for taking inside measurements of openings. Made of genuine Boxwood. First section of rule fitted with 6-inch brass extension slide.

Rule marked consecutive inches to 16ths. Both sides. Brass slide marked inches to 16ths.

| No. | Length, Feet | Weight, per Doz. Lbs. | Per Dozen |
|-------|--------------|-----------------------|-----------|
| X8536 | 6 | 4 1/4 | \$16.00 |

Packing: 1/2 Doz. in a Box

ALUMINUM RULES



Six Inch Folds—1/8 Inch Wide

Aluminum of a special hardness, and with solid brass joints, is rust-proof throughout.

Marked consecutive inches to 16ths. Both sides.

| Nos. | Length, Feet | Weight, per Doz. Lbs. | Per Dozen |
|-------------------------|--------------|-----------------------|-----------|
| 1204 | 4 | 3 | \$16.80 |
| 1205 | 5 | 3 3/4 | 21.00 |
| 1206 | 6 | 4 | 25.20 |
| H1206 With Folding Hook | 6 | 4 | 26.40 |

Packing: 1/4 Doz. in a Box

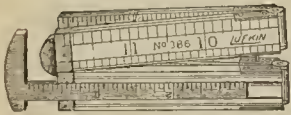
COMBINATION RULE, LEVEL AND PROTRACTOR



No. 863L — 2 Ft. Boxwood Rule with Spirit Level and Protractor. 1 1/2 Inch Wide Arch Joint Edge Plates. Unbound. Marked Drafting Scales and 8-16ths.\$24.00

No. 873L—Same as No. 863L Except That Outer Edge is Brass Bound 30.00

Packing: One in a Box

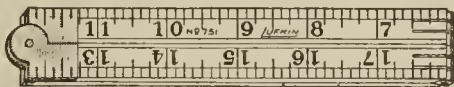
LUFKIN BOXWOOD RULES

No. 386 — One Foot, Four Fold. 1 In. Wide Arch Joint. Edge Plates. Marked: Rule 8-10-12-16ths. Caliper 16-32nds.

Weight per Dozen, $1\frac{1}{2}$ Lbs. Per Doz. **\$10.80**
 $\frac{1}{2}$ Doz. in a Box

No. 372—One Foot Two Fold. $1\frac{3}{8}$ Inches Wide. Square Joint. 6-inch Caliper. Marked: Rule 8-10-12-16ths. Caliper 16-32nds. Popular Because of Length of Caliper.
 Weight per Dozen, $1\frac{3}{4}$ Lbs. **10.20**
 $\frac{1}{2}$ Doz. in a Box

TWO FOOT—FOUR FOLD



No. 651—1 Inch Wide. Round Joint. Middle Plates Marked 8-16ths.
 Weight per Dozen, $1\frac{1}{4}$ Lbs. **\$3.00**
 One Doz. in a Box

No. 751—1 Inch Wide. Square Joint. Middle Plates. Marked 8-16ths. A Very Popular Rule.
 Weight per Dozen, $1\frac{1}{2}$ Lbs. **4.20**
 $\frac{1}{2}$ Doz. in a Box

No. 781—1 Inch Wide. Full Bound. Square Joint. Marked. Drafting Scales and 8-10-12-16ths. A Durable and Practical Rule.
 Weight per Dozen, $2\frac{1}{2}$ Lbs. **11.40**
 $\frac{1}{2}$ Doz. in a Box

SPEED INDICATORS



IMPROVED
 For counting the revolutions of a shaft.

Working parts enclosed as in a watch. Nickel plated and has a rubber handle that will not heat while running at high speed. Handle also acts as an insulator when used on electrical machinery.

While looking at a watch, each hundred revolutions may be counted by allowing the oval head pin on the revolving disc to pass under the thumb as the instrument is pressed to its work.

Rotating disc carried by friction may be moved to the starting point where the raised knobs coincide.

No. 106—Weight Each, $4\frac{1}{2}$ Ounces..... **\$1.85**
 No. 106—With Leather Case..... **3.20**
 Each

One in a Box

THICKNESS GAUGES

STARRETT

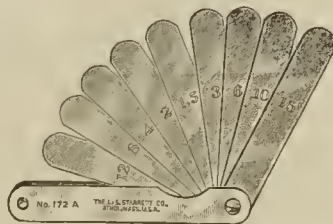
No. 172

Particularly useful in gauging narrow slots and in adjusting the air gap for valves on gasoline motors.

No. 172A has nine leaves, viz., .0015, .002, .003, .004, .006, .008, .010, .012 and .015.

Nos. 172B and 172C have eight leaves, with the omission of .0015. The leaves are tempered.

No. 172A

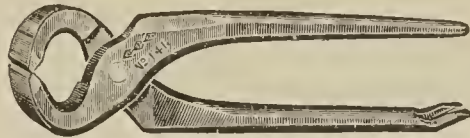


| Nos. | Length Case, Inches | Width Case, Inch | Length Leaves, Inches | Width Leaves, Inch | Weight Each, Ounces | Each |
|------|---------------------|------------------|-----------------------|--------------------|---------------------|---------------|
| 172A | $3\frac{3}{8}$ | $\frac{1}{2}$ | $3\frac{1}{16}$ | $\frac{1}{2}$ | 8 | \$1.50 |
| 172B | $4\frac{3}{4}$ | $\frac{1}{2}$ | $4\frac{1}{2}$ | $\frac{1}{2}$ | 8 | 2.50 |
| 172C | $6\frac{1}{4}$ | $\frac{1}{2}$ | 6 | $\frac{1}{2}$ | 8 | 3.00 |

One in a Box

CARPENTERS PINCERS

No. 141



This is the standard type of Carpenters Pincers of the claw type, with

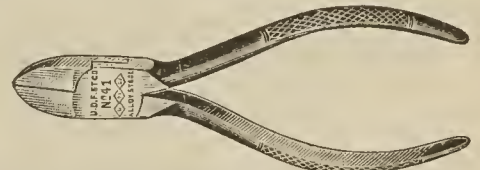
strong, sharp-cutting edges "that will cut." The shape of the head is so designed that it will remove fine moulding without scratching or marring.

| Size, Inches | Weight per Doz., Lbs. | Price, per Dozen |
|--------------|-----------------------|------------------|
| 6 | 7 | \$7.30 |
| 7 | 10 | 7.80 |
| 8 | 11 | 8.60 |
| 10 | 17 | 9.90 |

CUTTING PLIERS

No. 41

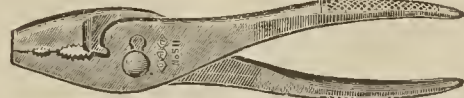
A diagonal cutting lap joint plier designed for use in assembling electrical apparatus of all kinds. The cutting knives are clean and sharp. This with the high leverage, makes a very easy cutting plier.



| Size, Inches | Weight per Doz., Lbs. | Price, per Dozen |
|----------------|-----------------------|------------------|
| 4 | 3 | \$15.10 |
| 5 | $3\frac{1}{4}$ | 16.65 |
| $5\frac{1}{2}$ | $4\frac{1}{2}$ | 18.65 |
| 6 | $5\frac{1}{2}$ | 20.00 |

COMBINATION PLIERS

No. 511



A heavy duty slip joint plier designed for work that the ordinary plier will not stand. The cutting knives pass at an angle so they cut clean. The heavy well shaped handles will not set or bend. Nickel plated finish.

| Size, Inches | Weight per Doz., Lbs. | Plain | Nickel Plate |
|--------------|-----------------------|----------------|----------------|
| 6 | $5\frac{1}{2}$ | \$11.00 | \$13.00 |
| 8 | $8\frac{1}{2}$ | 12.35 | 14.35 |
| 10 | $13\frac{1}{4}$ | 16.00 | 18.60 |

SIDE CUTTING PLIERS

No. 50

STANDARD

This is the ideal tool for electrical construction work. The handles are skillfully tempered so that they will not bend or set when great pressure is exerted on them. The cutting qualities are unsurpassed by any side cutting plier.



| Size, Inches | Weight per Doz., Lbs. | Per Dozen |
|--------------|-----------------------|----------------|
| 4 | 2 | \$11.40 |
| 5 | $3\frac{1}{4}$ | 12.65 |
| 6 | $6\frac{1}{4}$ | 13.70 |
| 7 | $7\frac{3}{4}$ | 15.20 |
| 8 | $10\frac{3}{4}$ | 16.45 |

No. 1050
COMPETITION

Lap Joint; forged from highest grade tool steel; oil tempered; full polished head; milled faced jaws; black finest smooth handles; heavy rivet joints; side cutters; round opening; a good plier at a moderate price.

| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | Length, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|------------------------|---------------|----------------|------------------------|----------------|
| 4 | 2 | \$9.90 | 7 | $7\frac{3}{4}$ | \$12.90 |
| 5 | $3\frac{1}{4}$ | 10.90 | 8 | $10\frac{3}{4}$ | 14.50 |
| 6 | $6\frac{1}{4}$ | 11.95 | .... | .... | .... |

BOLT CLIPPERS



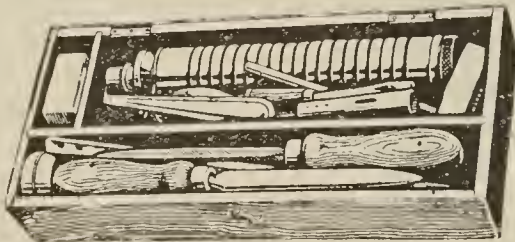
STYLE A
STRAIGHT CUT
Of rigid construction and with tremendous leverage;

there is a simple arrangement for adjusting the cutting jaws; jaws have a tough edge and are tempered for cutting annealed bolts, rivets and wire; suitable for repair work on furnaces, stoves, fences, wagons, automobiles, etc.

| Nos. | Capacity Inch | Length, Inches | Weight Each, Lbs | Each |
|------|------------------|-------------------|---------------------|--------|
| 10A | $\frac{3}{16}$ | 10 | $1\frac{3}{4}$ | \$3.45 |
| 14A | $\frac{1}{4}$ | 14 | $2\frac{3}{4}$ | 3.75 |
| 0A | $\frac{5}{16}$ | 18 | $3\frac{1}{4}$ | 4.70 |
| 1A | $\frac{3}{8}$ | 24 | 6 | 6.25 |
| 2A | $\frac{1}{2}$ | 30 | $10\frac{1}{4}$ | 8.75 |
| 3A | $\frac{5}{8}$ | 38 | $16\frac{3}{4}$ | 11.25 |

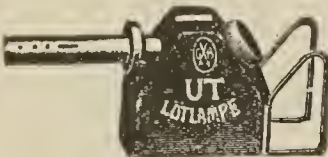
COMBINATION TORCH AND
SOLDERING IRONS

Contains torch complete with a soldering iron, three-square scraper, three-square file, piece of Sal-Ammoniac, box of soldering paste, piece of soldering tin and screwdriver.



Price\$3.00

LITTLE WONDER
TORCH



Burns in any position.
One filling lasts 55 minutes.

List Each
Price\$2.00

Powerful, general utility quart size torch. Tank is made of heavy gauge, seamless drawn brass, reinforced with automatic brass pump and fitted with patented double needle burner, producing a steady blue flame of intense heat, using very little fuel. It is impossible to enlarge the orifice. Can be used in hard wind or extreme cold. Burner hook is removable.



| No. | Capacity, Quart | Weight Each, Lbs. | Each |
|-----|--------------------|----------------------|--------|
| 144 | 1 | $4\frac{1}{4}$ | \$8.25 |

SOLDERING PASTE
NOKORODE



Absolutely non-corrosive. It will solder all metals with the exception of aluminum—without corroding or discoloring the metal in any way. It is compounded so carefully that the amount that can be picked up on the point of a pin is sufficient to flux the head of a tenpenny nail.

Not only most economical to use from the standpoint of quantity required, but it also makes a tight,

grease free, dirt free joint and leaves the surrounding metal absolutely clean and bright.

| Nos. | Size Can | Cans in a Case | Per Can |
|------|-----------|----------------|---------|
| K2 | Two Ounce | 36 | \$0.28 |
| K1 | One Pound | 6 | .... |

ELECTRIC SOLDERING IRONS



The tools are so designed that the elements are replaceable without discarding the expensive case, terminal, etc. Grade A nickel chrome resistance wire is used for winding the elements and the insulation is the best amber mica obtainable. A lava insulator is used for taking the winding or resistance wire off to the lead wires so that there is no possibility of the winding becoming short-circuited. This insulator is not affected by heat and it is perfectly secured to the element so that it cannot loosen or turn. Accurately machined tips which perfectly fit the heating element, insure good heat conduction from element to the tip. This perfect fit also serves to prolong the life of the tip seat in the element. Tips are easily removed by tapping with a hammer and unscrewing. Furnished for use with 32, 110 or 220 volts. Illustration shows iron mounted on display board.

| Nos. | Watts | Weight Each, Lbs. | Length O. A., Inches | Each | Tips Only | Elements Only |
|------|-------|----------------------|-------------------------|--------|--------------|------------------|
| 55 | 65 | 1 | $10\frac{1}{2}$ | \$5.50 | \$0.25 | \$2.50 |
| 56 | 65 | 1 | $10\frac{1}{2}$ | 5.50 | .45 | 2.50 |
| 85 | 100 | $1\frac{3}{16}$ | $12\frac{3}{4}$ | 6.00 | .32 | 3.00 |
| 101 | 85 | $1\frac{3}{16}$ | $12\frac{3}{4}$ | 6.00 | .45 | 3.00 |
| 121 | 120 | $1\frac{5}{16}$ | $12\frac{3}{4}$ | 9.00 | .75 | 4.00 |
| 201 | 200 | $1\frac{7}{8}$ | 14 | 9.50 | .75 | 5.00 |
| 350 | 350 | $4\frac{5}{16}$ | $14\frac{1}{2}$ | 13.50 | 1.50 | 7.00 |
| 500 | 500 | $5\frac{3}{8}$ | $14\frac{1}{2}$ | 16.50 | 2.50 | 9.50 |

Note—Nos. 55 and 85 have $\frac{3}{8}$ inch diameter tips; Nos. 56 and 101, $\frac{1}{2}$ inch; Nos. 121 and 201, 1 inch; No. 350, $1\frac{1}{8}$ inch and No. 500, $1\frac{5}{8}$ inch. Each tool is equipped with 6 feet of cord and plug.



JUNIOR

Blue steel, one piece case; mahogany, anti-heat handle; replaceable forged copper $\frac{7}{8}$ inch tip;

nickel chrome winding. A high grade iron. Length, $12\frac{3}{4}$ inches. With 6 feet of cord.

Each
Junior—Watts, 85; Weight Each, 1 Lb.....\$2.75

MELTING LADLES

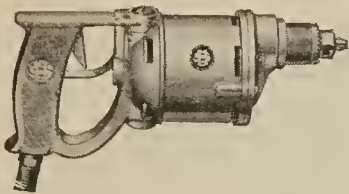
Made of wrought steel; double lipped; handle has eye for hanging.



| Nos. | Size, Inches | Lead Capacity, Lbs. | Each | Nos. | Size, Inches | Lead Capacity, Lbs. | Each |
|------|-----------------|---------------------------|--------|------|-----------------|---------------------------|--------|
| 10 | $2\frac{1}{2}$ | 1 | \$1.00 | 40 | 4 | 4 | \$1.60 |
| 20 | 3 | $1\frac{1}{2}$ | 1.20 | 60 | 5 | $8\frac{1}{2}$ | 2.10 |
| 30 | $3\frac{1}{2}$ | $2\frac{1}{2}$ | 1.40 | 80 | 6 | 15 | 2.40 |

PORTABLE ELECTRIC DRILLS

U. S.—110 OR 220 VOLTS

 $\frac{1}{4}$ AND $\frac{5}{16}$ INCH SIZES

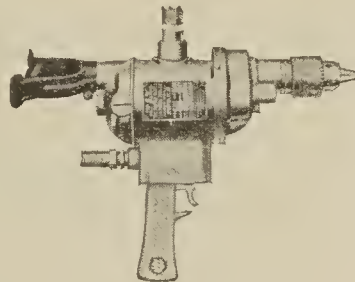
With universal motor for use on either alternating or direct current. Light weight; aluminum body; S.K.F. ball bearings; chrome nickel steel gears; oil, and grease lubrication.

With three jaw screw back chuck for straight shank drill bits, quick break indicating trigger switch, 12 feet flexible rubber covered cable, attachment plug and cable guard.

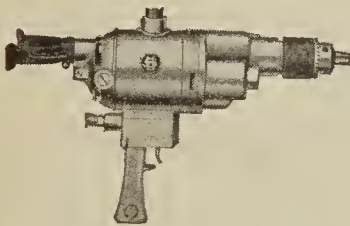
| Type | Capacity, Inch | Dimen., | R.P.M. | Weight | |
|--------------------------------|----------------|---------------|---------------------|-----------|-------------------------|
| | Steel | Wood | Inches | Full Load | Each, Lbs. Each |
| $\frac{1}{4}$ -in. Special | $\frac{1}{4}$ | $\frac{3}{8}$ | 4 x11 | 2000 | 5 $\frac{3}{8}$ \$27.00 |
| $\frac{1}{4}$ -in. | $\frac{1}{4}$ | $\frac{3}{8}$ | 3 $\frac{7}{8}$ x11 | 2000 | 6 30.00 |
| $\frac{5}{16}$ -in. Heavy Duty | $\frac{5}{16}$ | $\frac{7}{8}$ | 4 x12 | 1000 | 7 40.00 |

 $\frac{3}{8}$ AND $\frac{1}{2}$ INCH SIZES

Have universal motor for use on alternating or direct current. With chrome nickel gears; run in grease; quick break trigger switch; aluminum body; S.K.F. ball bearings; three jaw chuck; two side handles, one being removable; combination breast plate and spade handle. With 12 feet rubber covered cable and armored attachment plug. Timken, chucked. Spindle in the $\frac{1}{2}$ special.



| Type | Capacity, Inch | Dimen., | R.P.M. | Weight | |
|----------------------------|----------------|---------------|-----------------------------------|-----------|------------------------|
| | Steel | Wood | Inches | Full Load | Each, Lbs. Each |
| $\frac{3}{8}$ -in. | $\frac{3}{8}$ | $\frac{1}{2}$ | 4 $\frac{1}{2}$ x16 | 750 | 14 \$50.00 |
| $\frac{1}{2}$ -in. Special | $\frac{1}{2}$ | $\frac{3}{4}$ | 4 $\frac{1}{2}$ x16 $\frac{1}{2}$ | 450 | 14 $\frac{1}{2}$ 48.00 |

 $\frac{1}{2}$ INCH HEAVY DUTY AND $\frac{5}{8}$ INCH SIZES

With universal motor for operation on direct or alternating current. Built for continuous heavy duty work, the $\frac{5}{8}$ inch size being adaptable for driving portable cylinder hones;

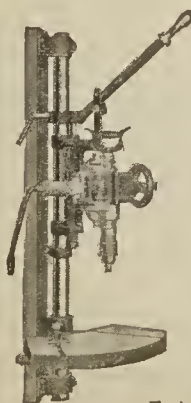
aluminum body; S.K.F. ball bearings; three jaw, screw back chuck. With two side handles, one removable, combination breast plate and spade handle, twelve feet of rubber covered cord and armored attachment plug.

| Type | Capacity, Inch | Dimen., | R.P.M. | Wgt. Ea., | |
|-------------------------------|----------------|-----------------|--------|-----------|------------|
| | Steel | Wood | Inches | Full Load | Lbs. Each |
| $\frac{1}{2}$ -in. Heavy Duty | $\frac{1}{2}$ | $\frac{3}{4}$ | 5x18 | 450 | 18 \$63.00 |
| $\frac{5}{8}$ -in. | $\frac{5}{8}$ | $\frac{7}{8}$ | 5x19 | 400 | 20 68.00 |
| $\frac{3}{4}$ -in. | $\frac{3}{4}$ | 1 $\frac{1}{4}$ | 5x19 | 400 | 21 75.00 |

POST DRILL STAND

U. S. No. 1B—HEAVY DUTY

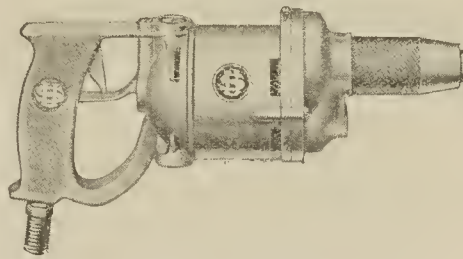
For use with all U. S. drills, sizes $\frac{1}{2}$ to $\frac{7}{8}$ inch inclusive and Nos. 3 and 4 screw drivers. Bracket carries drills without need of adapters. Can be raised or lowered or swung around on the vertical column and secured in any desired position by means of split collar and clamping screw. Drill or screw driver supported by inclosed spring. Height of column, 60 inches; size of base, 18x10 inches; distance, center of column to drill bit, 6 $\frac{1}{4}$ inches; maximum distance, base to drill chuck, 32 inches; travel of feed, 6 inches; diameter of column, 1 $\frac{7}{8}$ inches.



Each

No. 1B—Weight Stand, 98 Lbs.\$20.00

SCREW DRIVERS AND NUT SETTERS



U. S.—ELECTRIC

Similar design and construction to the U. S. drills except equipped with positive clutch normally held in open position, engaged by pressure on tool and released when

screws or nuts are driven up tight. Bits, with removable blades, are locked in place by a spring pressed ball; over size, universal, 110 volt motors; S.K.F. ball bearings; trigger switch; 12 feet cable and armored plug. Nos. 1 and 2 furnished with two screw driver bits; Nos. 3 and 4, with socket wrench, combination spade handle and side handle. No. 1 will drive 2 inch No. 12 screw, No. 2, 3 $\frac{1}{4}$ inch No. 16 screw into hardwood. Nos. 3 and 4 drive lag screws and run up nuts.

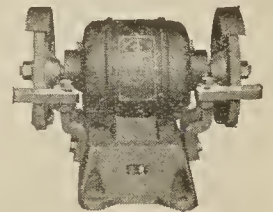
| Nos. | Load Speed, R.P.M. | Dimensions, Inches | Weight Each, Lbs. | Each |
|------|--------------------|---------------------|-------------------|---------|
| 1 | 450 | 4 x10 $\frac{3}{4}$ | 6 | \$48.00 |
| 2 | 450 | 4 x11 $\frac{1}{4}$ | 8 $\frac{1}{2}$ | 68.00 |
| 3 | 300 | 4 $\frac{1}{2}$ x16 | 15 | 88.00 |
| 4 | 150 | 5 x17 $\frac{1}{2}$ | 24 | 108.00 |

Extras—Reversing switch for Nos. 1 and 2, \$7.50; for No. 3, \$10.00. Higher speed, additional, \$2.50.

BENCH GRINDERS

6 INCH SIZE

For alternating 25 to 60 cycles or direct current, 110, 220 volts. Motors are not universal. Furnished with wheel guards, adjustable tool rests, one coarse and one fine, 6x $\frac{1}{2}$ x $\frac{1}{2}$ inch wheels, switch, 12 feet rubber covered cable and attachment plug. Ball bearing $\frac{1}{4}$

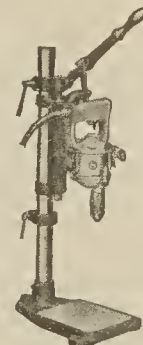


H.P. motor with load speed of 3450 R.P.M. Dimensions overall, 14x10x10 inches; weight each, 34 $\frac{1}{2}$ pounds.

| | |
|---------------------------------------|---------|
| With Alternating Current Motor..... | \$34.50 |
| With Direct Current Motor | 36.50 |
| Twist Drill Grinding Attachment | 15.00 |

BENCH DRILL STANDS

U. S.—TYPE Q



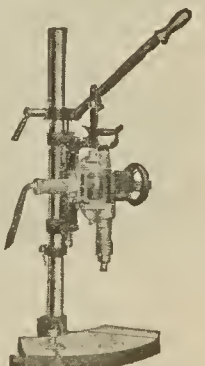
For use with all $\frac{1}{4}$ and $\frac{5}{16}$ inch drills and Nos. 1 and 2 screw drivers. Drill can be adjusted vertically and laterally and held in any desired position by clamping screws. Quickly attached or detached. Column with drill can be swung completely around. Height column, 24 inches; size base, 6x7 inches; column to bit, 4 $\frac{1}{8}$ inches; maximum, base to chuck, 11 $\frac{1}{2}$ inches; feed travel, 3 $\frac{3}{8}$ inches.

Each

TYPE Q—Weight Stand Only, 18Lbs.\$12.00

U. S. No. 1B BENCH—HEAVY DUTY

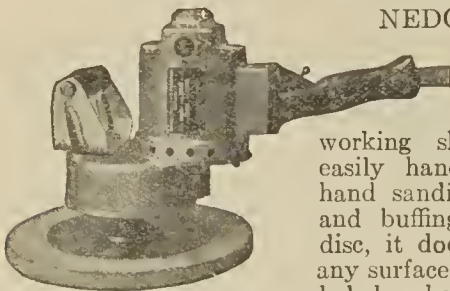
For use with U. S. $\frac{1}{2}$ inch electric drills and the Nos. 3 and 4 screw driver. Bracket carrying drill is designed to eliminate the use of adapters. Can be raised or lowered or swung around on vertical column and secured in any desired position by means of split collar and clamping screw. Drill is supported by inclosed spring. Height of column, 37 inches; size of base, 10x18 inches; distance from column to center of bit, 6 $\frac{1}{4}$ inches; maximum distance, base to drill chuck, 17 inches; feed travel, 1 $\frac{7}{8}$ inches; diameter of column, 1 $\frac{7}{8}$ inches.



Each

No. 1B—Weight Each, 85 Lbs....\$16.00

POLISHING & SANDING MACHINES



NEDCO—ELECTRIC

Made especially for boat builders. repair and wood-working shops. Portable and easily handled. Eliminates all hand sanding, wire brush, filing and buffing. Used with a felt disc, it does a polishing job on any surface that cannot be equalled by hand work. Equipped with Universal motor; runs from any ordinary light socket. Equipment includes 10 feet of unbreakable cord, unbreakable plug, flexible pad and switch. Grit discs used are 9¼ inches in diameter, rubbing felts are 8x½ inches; polishing felts, 8x¾ inches. Discs and felts must be ordered separately, they are not supplied with the machine.

Each
NEDCO—Weight Each, 12 Lbs.\$100.00

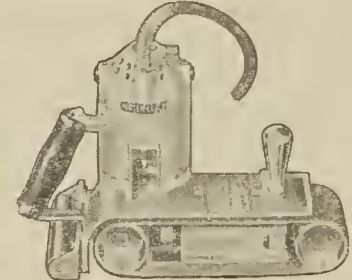
ELECTRIC SANDERS

TAKEABOUT

For use in place of hand sanding or polishing. Concave or convex surfaces can be sanded; the shape of the block over which the belt travels determines what form the belt shall take. A flexible felt pad and a flat block are furnished, others can be readily made up as wanted. The right hand side of this sander is free from obstruction, allowing surfacing right up to the edge. One piece aluminum housing; cast aluminum motor cap and pulleys. Equipped with a ¼ H.P. universal 110 volt motor which may be used on alternating current, 25 to 60 cycles. A worm gear, ball bearing and totally enclosed, drives rear pulley. Automatic belt tightener. Equipment includes six belts, flexible pad, switch, 10 feet of cable with unbreakable plug. Size of belts, 3x24 inches; diameter of pulleys, 2¼ inches; belt speed, 1300 feet per minute; size overall, 6 inches wide; 13½ inches long and 8½ inches high. Toggle switch control.

Each
No. B5—Weight, 14 Lbs.\$78.00

Note—Other voltages can be supplied on order.




HEAVY DUTY MODEL

Equipped with Universal 110 or 220 volt motor and 4x 27 inch belt. Is 15½ inches long and 9½ inches high. Equipment is same as smaller sander but with 15 feet of cord.

Each
No. B4—Weight, 23 Lbs.\$110.00

PORTABLE SAWS



The "Kwiksaw" Portable Saw is a new, light type, electrically driven Hand Saw built for a market that has been demanding an inexpensive tool which its simple, efficient design makes possible.

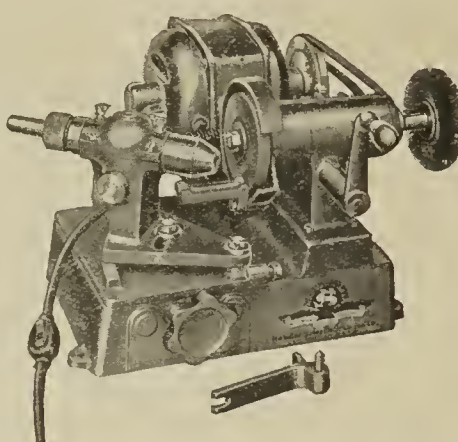
Specifications:
A. C. and D. C.
Motor. 110 volts.

TYPE K-7

Saw Blade, 7¼" diameter with ½" hole.
Saw speed, idle, 10,000 r. p. m.
State voltage required.

Each
No. K-7\$35.00

U. S. MODEL VR4 VALVE REFACERS



The Model "VR4" valve refacer is equipped with sturdy motor, which drives the grinding spindle through "V" type belt. The chucking spindle is driven from the same motor. This drives a flexible shaft, transmitting the power to a worm gear drive.

The grinding quill is moved across the valve by lever feed; speeding the work, and the valve is fed into the wheel with a screw feed.

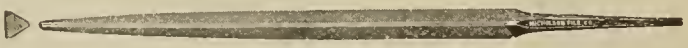
Valves may be ground at any desired angle from 30° to 60°, inclusive.

The grinding spindle is mounted on Ball Bearings, ground to closest limits; collet chuck gripping the valve up to ½-inch stem at a point one inch from the head, and a spring loaded cone supporting the end of the stem assures a proper fit on the ground seating surface.

Standard equipment includes diamond wheel dresser, "V" block, and twelve feet of rubber covered cable.

Model "VR4"\$95.00


FILES



SLIM TAPER

Especially designed for sharpening hand saws. Forged from tool steel; tempered, tested and selected.

| Length, Inches | Weight per Dozen, Lb. | Per Dozen | Length, Inches | Weight per Dozen, Lbs | Per Dozen |
|----------------|-----------------------|-----------|----------------|-----------------------|-----------|
| 3 | 1/8 | \$2.10 | 6 | 1 1/8 | \$3.10 |
| 3 1/2 | 3/16 | 2.10 | 7 | 1 3/4 | 3.80 |
| 4 | 1/4 | 2.20 | 8 | 2 5/8 | 4.50 |
| 4 1/2 | 5/16 | 2.30 | 10 | 2 7/8 | 6.40 |
| 5 | 3/8 | 2.50 | 12 | 9 | 9.50 |
| 5 1/2 | 7/16 | 2.90 | .. | ... | ..... |



DOUBLE-ENDED TAPER

Especially designed for filing hand saws. Forged from tool steel; tempered, tested and selected.

| Length, Inches | Weight per Dozen, Lbs. | Per Dozen | Length, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|------------------------|-----------|----------------|------------------------|-----------|
| 7 | 1/8 | \$3.50 | 10 | 1 1/4 | \$4.90 |
| 8 | 1/4 | 3.90 | 12 | 1 3/4 | 6.00 |
| 9 | 1 1/8 | 4.40 | ... | .... | ..... |

Boat Builders find Tiebout Hardware of great value in producing Standard Craft of high quality and reasonable prices.

FILES



MILL

Single cut. Used for filing mild steel work, for sharpening mill saws, mowing machine knives, lathe work, draw-filing, etc.

| Length, Inches | Weight Per Dozen, Lbs. | Bastard | Per Dozen Second Cut | Smooth |
|-------------------|---------------------------|---------|-------------------------|--------|
| 3 | $\frac{3}{8}$ | \$3.00 | .... | .... |
| 4 | $\frac{7}{16}$ | 3.00 | \$3.50 | .... |
| 5 | $\frac{3}{4}$ | 3.20 | 3.80 | .... |
| 6 | $\frac{5}{8}$ | 3.50 | 4.00 | \$4.50 |
| 7 | $2\frac{1}{2}$ | 3.90 | 4.60 | .... |
| 8 | 3 | 4.30 | 4.90 | 5.40 |
| 9 | $4\frac{1}{4}$ | 4.90 | 5.80 | .... |
| 10 | $5\frac{5}{8}$ | 5.60 | 6.40 | 7.00 |
| 12 | $9\frac{3}{16}$ | 7.50 | 8.60 | 9.40 |
| 14 | 14 | 10.70 | 12.20 | 13.10 |
| 16 | $20\frac{1}{8}$ | 14.70 | 16.80 | 17.90 |
| 18 | .... | 20.20 | .... | .... |

Sizes 3 to 10 Inch, Twelve; All Others, Six in a Box



MILL—ONE ROUND EDGE

Used for filing the gullet or space between saw teeth.

| Lgth., Inches | Wgt. Per Doz., Lbs. | —Per Dozen— Bastard 2nd Cut | Lgth., Inches | Wgt. Per Doz., Lbs. | —Per Dozen— Bastard 2nd Cut |
|------------------|---------------------------|--------------------------------|------------------|---------------------------|--------------------------------|
| 6 | $1\frac{1}{4}$ | \$3.90 \$4.50 | 10 | $5\frac{7}{16}$ | \$6.30 \$7.20 |
| 7 | $2\frac{1}{2}$ | 4.40 5.20 | 12 | $8\frac{1}{8}$ | 8.40 9.70 |
| 8 | $2\frac{7}{8}$ | 4.80 5.50 | 14 | $13\frac{5}{8}$ | 12.00 |
| 9 | $4\frac{1}{16}$ | 5.50 6.50 | .... | .... | .... |

Sizes 6 to 10 Inch, Twelve; All Others, Six in a Box



MILL—TWO ROUND EDGES

| Lgth., Inches | Wgt. Per Doz., Lbs. | —Per Dozen— Bastard 2nd Cut | Lgth., Inches | Wgt. Per Doz., Lbs. | —Per Dozen— Bastard 2nd Cut |
|------------------|---------------------------|--------------------------------|------------------|---------------------------|--------------------------------|
| 6 | $1\frac{1}{4}$ | \$4.40 \$5.00 | 9 | $4\frac{1}{16}$ | \$6.10 |
| 7 | $2\frac{1}{2}$ | 4.90 | 10 | $5\frac{7}{16}$ | 7.00 \$8.00 |
| 8 | $2\frac{7}{8}$ | 5.40 6.10 | 12 | $8\frac{1}{8}$ | 9.40 10.80 |

Sizes 6 to 10 Inch, Twelve; All Others, Six in a Box



ROUND

Taper and blunt; single cut. Made in blunt shape for heavier classes of work.

| Taper | | | | |
|-------------------|---------------------------|---------|-------------------------|--------|
| Length, Inches | Weight Per Dozen, Lbs. | Bastard | Per Dozen Second Cut | Smooth |
| 4 | $\frac{1}{4}$ | \$3.00 | \$3.50 | \$3.90 |
| 5 | $\frac{7}{16}$ | 3.20 | 3.80 | 4.10 |
| 6 | $\frac{3}{4}$ | 3.50 | 4.00 | 4.50 |
| 7 | $1\frac{1}{8}$ | 3.90 | 4.60 | 4.90 |
| 8 | $1\frac{9}{16}$ | 4.30 | 4.90 | 5.40 |
| 9 | $2\frac{1}{4}$ | 4.90 | 5.80 | 6.30 |
| 10 | 3 | 5.60 | 6.40 | 7.00 |
| 12 | $6\frac{1}{8}$ | 7.50 | 8.60 | 9.40 |
| 14 | $12\frac{3}{8}$ | 10.70 | 12.20 | 13.10 |
| 16 | $20\frac{3}{16}$ | 14.70 | 16.80 | 17.90 |
| 18 | $32\frac{5}{8}$ | 20.20 | 22.70 | 24.30 |
| 20 | 49 | 27.40 | .... | .... |
| Blunt | | | | |
| 8 | $2\frac{1}{8}$ | 5.60 | .... | .... |
| 10 | $3\frac{1}{16}$ | 7.50 | .... | .... |
| 12 | $8\frac{3}{8}$ | 10.70 | .... | .... |
| 14 | $14\frac{3}{4}$ | 14.70 | .... | .... |

Sizes 4 to 10 Inch, Twelve; All Others, Six in a Box

FILES



HALF ROUND

Taper, double cut. Those finer than bastard are cut single on the convex side.

| Length, Inches | Weight Per Dozen, Lbs. | Bastard | Per Dozen Second Cut | Smooth |
|-------------------|---------------------------|---------|-------------------------|--------|
| 4 | $\frac{1}{2}$ | \$4.80 | \$5.60 | \$6.10 |
| 5 | $\frac{7}{8}$ | 5.40 | 6.10 | 6.40 |
| 6 | $1\frac{1}{2}$ | 6.10 | 6.70 | 7.10 |
| 7 | 3 | 7.00 | 7.70 | 8.20 |
| 8 | $3\frac{1}{4}$ | 7.50 | 8.30 | 8.90 |
| 10 | $6\frac{5}{16}$ | 9.10 | 10.10 | 10.70 |
| 12 | $10\frac{9}{16}$ | 11.80 | 13.00 | 13.90 |
| 14 | $16\frac{5}{8}$ | 15.50 | 17.00 | 18.30 |
| 16 | $23\frac{5}{16}$ | 20.60 | 22.50 | 24.20 |
| 18 | 34 | 27.50 | 29.90 | 32.00 |



FLAT

The most common file in use, and employed by mechanics generally for a variety of purposes. Made in double cut.

| Length, Inches | Weight Per Dozen, Lbs. | Bastard | Per Dozen Second Cut | Smooth |
|-------------------|---------------------------|---------|-------------------------|--------|
| 4 | $\frac{9}{16}$ | \$3.70 | \$4.30 | \$4.70 |
| 5 | $\frac{7}{8}$ | 3.90 | 4.60 | 4.90 |
| 6 | $1\frac{1}{2}$ | 4.30 | 4.80 | 5.30 |
| 7 | $2\frac{1}{8}$ | 4.80 | 5.50 | 6.10 |
| 8 | $3\frac{7}{16}$ | 5.30 | 6.10 | 6.60 |
| 9 | $4\frac{3}{4}$ | 6.30 | 7.20 | 7.90 |
| 10 | $6\frac{7}{8}$ | 7.00 | 8.10 | 8.70 |
| 12 | $11\frac{3}{4}$ | 9.70 | 11.00 | 12.10 |
| 14 | $18\frac{9}{16}$ | 13.30 | 15.30 | 16.70 |
| 16 | 27 | 17.80 | 20.10 | 22.30 |
| 18 | $38\frac{1}{2}$ | 23.90 | 26.80 | 29.20 |
| 20 | 52 | 31.50 | .... | .... |



SQUARE

Tapered, double cut. Used in all branches of mechanical industry.

| Length, Inches | Weight Per Dozen, Lbs. | Bastard | Per Dozen Second Cut | Smooth |
|-------------------|---------------------------|---------|-------------------------|--------|
| 4 | $\frac{1}{4}$ | \$3.80 | \$4.60 | \$4.90 |
| 5 | $\frac{1}{2}$ | 4.10 | 4.80 | 5.30 |
| 6 | $\frac{3}{8}$ | 4.60 | 5.10 | 5.50 |
| 7 | $1\frac{1}{4}$ | 5.10 | 5.80 | 6.30 |
| 8 | $1\frac{3}{8}$ | 5.50 | 6.30 | 7.00 |
| 10 | $3\frac{1}{16}$ | 7.40 | 8.50 | 9.10 |
| 12 | $8\frac{3}{8}$ | 10.20 | 11.50 | 12.80 |
| 14 | $15\frac{1}{4}$ | 13.90 | 16.10 | 17.50 |
| 16 | $25\frac{1}{4}$ | 18.70 | 21.20 | 23.30 |
| 18 | $39\frac{3}{16}$ | 25.10 | 28.20 | 30.40 |
| 20 | 57 | 32.80 | .... | .... |



TAPER

Tapered; single and double cut; second cut. Single cut is used principally for sharpening hand saws, while double cut is used for fine-toothed hand hacksaws.

| Length, Inches | Weight Per Dozen, Lbs. | Single Cut | Per Dozen Double Cut |
|-------------------|---------------------------|------------|-------------------------|
| 3 | $\frac{1}{4}$ | \$2.10 | .... |
| $3\frac{1}{2}$ | $\frac{7}{16}$ | 2.10 | \$.... |
| 4 | $\frac{3}{4}$ | 2.20 | 2.90 |
| $4\frac{1}{2}$ | $\frac{1}{2}$ | 2.40 | 3.10 |
| 5 | $1\frac{1}{16}$ | 2.60 | 3.50 |
| $5\frac{1}{2}$ | $1\frac{9}{16}$ | 3.00 | .... |
| 6 | 2 | \$3.40 | .... |
| 7 | $2\frac{1}{16}$ | 4.30 | .... |
| 8 | $4\frac{3}{16}$ | 5.40 | .... |
| 10 | $7\frac{7}{16}$ | 8.10 | .... |
| 12 | $12\frac{1}{16}$ | 12.50 | .... |

All Above, Up to and Including 10 Inch, Twelve in a Box; Larger Sizes, Six in a Box

STRAIGHT SHANK TWIST DRILLS



JOBBER'S LENGTH OR SHORT SET

| No. 105—Carbon Steel | | | | No. 405—High Speed | | | |
|----------------------|-----------------------------|--------------------------------|---------------|--------------------|-----------------------------|--------------------------------|---------------|
| Diam., Inch. | Length Over All, Ins. | —Per Dozen— Carbon Steel | High Speed | Diam., Inch. | Length Over All, Ins. | —Per Dozen— Carbon Steel | High Speed |
| 1/8 | 1 1/8 | \$1.50 | .... | 3/32 | 4 1/4 | \$3.80 | \$9.10 |
| 3/16 | 1 1/8 | 1.55 | .... | 1/8 | 4 3/8 | 4.00 | 10.50 |
| 1/4 | 2 1/2 | 1.60 | \$5.70 | 5/16 | 4 1/2 | 4.35 | 10.50 |
| 5/16 | 2 5/8 | 1.65 | 5.70 | 3/4 | 4 5/8 | 4.70 | 12.00 |
| 3/8 | 2 3/4 | 1.70 | 5.70 | 7/16 | 4 3/4 | 5.05 | 12.00 |
| 7/16 | 2 7/8 | 1.75 | 5.90 | 1/2 | 4 7/8 | 5.50 | 13.50 |
| 1/2 | 3 | 1.80 | 5.90 | 9/16 | 5 | 6.00 | 13.50 |
| 5/8 | 3 1/8 | 1.85 | 6.10 | 5/8 | 5 1/8 | 6.50 | 15.00 |
| 3/4 | 3 1/4 | 1.90 | 6.10 | 11/16 | 5 1/4 | 7.00 | 15.00 |
| 7/8 | 3 3/8 | 2.00 | 6.30 | 3/4 | 5 3/8 | 7.75 | 17.00 |
| 1 1/8 | 3 1/2 | 2.25 | 6.30 | 13/16 | 5 1/2 | 8.50 | 17.00 |
| 1 1/4 | 3 5/8 | 2.50 | 7.00 | 7/8 | 5 5/8 | 9.25 | 18.75 |
| 1 1/2 | 3 3/4 | 2.75 | 7.00 | 15/16 | 5 3/4 | 10.00 | 18.75 |
| 1 3/4 | 3 7/8 | 3.00 | 7.35 | 1 | 5 7/8 | 11.00 | 20.00 |
| 1 7/8 | 4 | 3.25 | 7.35 | 1 1/16 | 6 | 12.00 | 20.00 |
| 2 | 4 1/8 | 3.50 | 9.10 | .. | .. | .... | .... |

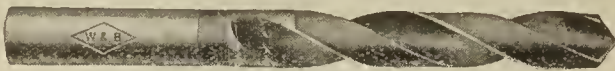
TWIST DRILLS



WITH TAPER SHANKS

| No. 102—Carbon Steel | | | | No. 555—High Speed Steel | | | |
|----------------------|--------------------------------|---------------------------|---------------|--------------------------|--------------------------------|---------------------------|---------------|
| Diam., Inch. | Length Over- all, Inches | —Each— Carbon Steel | High Speed | Diam., Inch. | Length Over- all, Inches | —Each— Carbon Steel | High Speed |
| 1/8 | 5 1/8 | \$0.45 | \$0.90 | 1/8 | 5 1/8 | \$3.75 | \$6.75 |
| 9/64 | 5 3/8 | .45 | .90 | 1 1/32 | 11 1/8 | 3.75 | 6.75 |
| 5/32 | 5 3/8 | .45 | .90 | 1 1/16 | 11 1/4 | 4.00 | 7.25 |
| 11/64 | 5 3/4 | .50 | .90 | 1 1/8 | 11 1/2 | 4.00 | 7.25 |
| 3/16 | 5 3/4 | .50 | .90 | 1 1/4 | 11 3/4 | 4.25 | 7.75 |
| 13/64 | 6 | .55 | 1.00 | 1 1/2 | 12 | 4.25 | 7.75 |
| 7/32 | 6 | .55 | 1.00 | 1 3/4 | 12 1/2 | 4.50 | 8.25 |
| 15/64 | 6 1/8 | .60 | 1.10 | 1 5/8 | 12 3/4 | 4.50 | 8.25 |
| 1/4 | 6 1/8 | .60 | 1.10 | 1 3/4 | 12 3/4 | 4.75 | 8.90 |
| 17/64 | 6 1/4 | .65 | 1.20 | 1 7/8 | 12 7/8 | 4.75 | 8.90 |
| 9/32 | 6 1/4 | .65 | 1.20 | 1 11/16 | 12 | 5.00 | 9.50 |
| 19/64 | 6 3/8 | .70 | 1.30 | 1 3/4 | 12 | 5.00 | 9.50 |
| 5/16 | 6 3/8 | .70 | 1.30 | 1 13/16 | 12 1/8 | 5.25 | 10.15 |
| 11/16 | 6 1/2 | .75 | 1.40 | 1 7/8 | 12 1/8 | 5.25 | 10.15 |
| 1 1/8 | 6 1/2 | .75 | 1.40 | 1 15/16 | 12 1/2 | 5.50 | 10.75 |
| 1 1/4 | 6 3/4 | .80 | 1.50 | 1 1/4 | 12 1/2 | 5.50 | 10.75 |
| 1 1/2 | 6 3/4 | .80 | 1.50 | 1 1/2 | 14 1/8 | 5.75 | 11.50 |
| 1 3/4 | 7 | .90 | 1.65 | 1 3/4 | 14 1/8 | 5.75 | 11.50 |
| 1 7/8 | 7 | .90 | 1.65 | 1 5/8 | 14 1/4 | 6.00 | 12.25 |
| 2 | 7 1/4 | 1.00 | 1.75 | 1 11/16 | 14 1/4 | 6.00 | 12.25 |
| 2 1/8 | 7 1/4 | 1.00 | 1.75 | 1 3/4 | 14 3/8 | 6.25 | 13.00 |
| 2 1/4 | 7 1/2 | 1.10 | 1.90 | 1 15/16 | 14 3/8 | 6.25 | 13.00 |
| 2 1/2 | 7 1/2 | 1.10 | 1.90 | 1 7/8 | 14 1/2 | 6.50 | 13.75 |
| 2 3/4 | 7 5/8 | 1.20 | 2.00 | 1 3/4 | 14 1/2 | 6.50 | 13.75 |
| 1 1/2 | 7 5/8 | 1.20 | 2.00 | 1 15/16 | 14 5/8 | 7.00 | 14.65 |
| 1 3/4 | 7 7/8 | 1.30 | 2.15 | 1 1/2 | 14 5/8 | 7.00 | 14.65 |
| 1 7/8 | 7 7/8 | 1.30 | 2.15 | 1 3/4 | 14 3/4 | 7.50 | 15.50 |
| 2 | 8 1/4 | 1.40 | 2.25 | 1 15/16 | 14 3/4 | 7.50 | 15.50 |
| 2 1/8 | 8 1/4 | 1.40 | 2.25 | 1 7/8 | 14 7/8 | 8.00 | 16.40 |
| 2 1/4 | 8 3/4 | 1.50 | 2.40 | 1 15/16 | 14 7/8 | 8.00 | 16.40 |
| 2 1/2 | 8 3/4 | 1.50 | 2.40 | 1 3/4 | 15 | 8.50 | 17.25 |
| 2 3/4 | 8 3/4 | 1.60 | 2.50 | 1 1/2 | 15 | 8.50 | 17.25 |
| 2 7/8 | 8 3/4 | 1.60 | 2.50 | 1 5/8 | 15 | 9.00 | 18.15 |
| 3 | 9 | 1.70 | 2.75 | 1 17/32 | 15 | 9.00 | 18.15 |
| 3 1/8 | 9 | 1.70 | 2.75 | 1 35/64 | 15 1/4 | 9.50 | 19.00 |
| 3 1/4 | 9 1/4 | 1.80 | 3.00 | 1 1/8 | 15 1/4 | 9.50 | 19.00 |
| 3 1/2 | 9 1/4 | 1.80 | 3.00 | 1 37/64 | 15 1/2 | 10.00 | 20.00 |
| 3 3/4 | 9 1/2 | 1.90 | 3.25 | 1 15/16 | 15 1/2 | 10.00 | 20.00 |
| 3 7/8 | 9 1/2 | 1.90 | 3.25 | 1 39/64 | 15 5/8 | 10.50 | 21.00 |
| 4 | 9 3/4 | 2.00 | 3.50 | 1 5/8 | 15 5/8 | 10.50 | 21.00 |
| 4 1/4 | 9 3/4 | 2.00 | 3.50 | 1 11/16 | 15 3/4 | 11.00 | 22.00 |

STRAIGHT SHANK TWIST DRILLS



TAPER LENGTHS

| No. 104—Carbon Steel | | No. 444—High Speed | |
|----------------------|------------------------------|--------------------|---------------|
| Diam., Inches | Length Overall, Inches | —Each— Steel | High Speed |
| 1/8 | 5 1/8 | \$0.45 | \$0.90 |
| 9/64 | 5 3/8 | .45 | .90 |
| 5/32 | 5 3/8 | .45 | .90 |
| 11/64 | 5 3/4 | .50 | .90 |
| 3/16 | 5 3/4 | .50 | .90 |
| 13/64 | 6 | .55 | 1.00 |
| 7/32 | 6 | .55 | 1.00 |
| 15/64 | 6 1/8 | .60 | 1.10 |
| 1/4 | 6 1/8 | .60 | 1.10 |

Twist lengths are approximately 60% of overall lengths

MACHINE SCREW TAPS



A. S. M. E. STANDARD

| Screw Gauge Nos. | Basic Outside Diam., Inch | Threads per Inch— Standard | | Also Furnished | —Each— | |
|------------------------|---------------------------------|-------------------------------|--------|-------------------|-----------------|------------------------|
| | | Fine | Coarse | | Carbon Steel | High Speed Steel |
| 0 | .060 | 80 | .. | .. | \$0.50 | .... |
| 1 | .073 | 72 | 64 | 56 | .50 | .... |
| 2 | .086 | 64 | 56 | .. | .45 | .... |
| 3 | .099 | 56 | 48 | .. | .40 | .... |
| 4 | .112 | 48 | 40 | 32, 36 | .40 | \$0.70 |
| 5 | .125 | 44 | 40 | 36 | .35 | .... |
| 6 | .138 | 40 | 32 | 36 | .35 | .70 |
| 7 | .151 | 36 | 32 | 30 | .35 | .... |
| 8 | .164 | 36 | 32 | 30, 40 | .35 | .70 |
| 9 | .177 | 32 | 30 | 24 | .35 | .... |
| 10 | .190 | 32 | 24 | 28, 30 | .40 | .75 |
| 12 | .216 | 28 | 24 | 32 | .45 | .80 |
| 14 | .242 | 24 | .. | 20 | .45 | .85 |
| 16 | .268 | .. | .. | 18, 20, 22 | .45 | .... |
| 18 | .294 | .. | .. | 18, 20 | .50 | .... |
| 20 | .320 | .. | .. | 16, 18, 20 | .50 | .... |

When so ordered, the taps will be furnished in sets of taper, plug and bottoming, like hand taps.

Plug taps furnished unless otherwise specified.
Taps up to and including No. 6 have three flutes, all others have four.

PIPE TAPS

G.T.D.



A high grade tap made from selected crucible tool steel; taper pattern furnished unless straight pattern is specified.

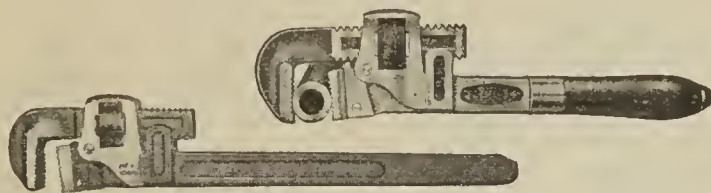
| Size, Inches | Number Threads, Briggs Std. | Length of Thread, Inches | Length Overall, Inches | —Each— | |
|-----------------|-----------------------------------|--------------------------------|------------------------------|-----------------|---------------------|
| | | | | Carbon Steel | High Speed Steel |
| 1/8 | 27 | 3/4 | 2 1/8 | \$1.00 | \$1.10 |
| 1/4 | 18 | 1 1/8 | 2 1/8 | 1.20 | 1.50 |
| 3/8 | 18 | 1 1/8 | 2 1/8 | 1.60 | 1.95 |
| 1/2 | 14 | 1 3/8 | 3 1/8 | 2.00 | 3.10 |
| 3/4 | 14 | 1 3/8 | 3 1/4 | 2.80 | 4.40 |
| 1 | 11 1/2 | 1 3/4 | 3 3/4 | 4.40 | 7.80 |
| 2 | 11 1/2 | 1 3/4 | 4 1/2 | 10.00 | 27.25 |

Right and left hand pipe taps furnished at the same list price.

High speed steel taps regular in right hand Briggs Standard taper thread only.

Unless otherwise specified, Briggs Standard right hand taper pipe threads will be furnished.

PIPE WRENCHES



Drop forged from selected bar steel; milled jaws; interchangeable parts. Grips firmly and will not crush pipe or slip. Inserted jaw in handle can be replaced when worn. Provided with nut guards, which prevent accidental rotation of nut while in use. Wood handle furnished on sizes 6 to 14 inches; steel handles all other sizes.

| Length, Inches | Pipe Capacity, Inches | Weight Each, Lbs. | Each | Length, Inches | Pipe Capacity, Inches | Weight Each, Lbs. | Each |
|----------------|-----------------------|-------------------|--------|----------------|-----------------------|-------------------|--------|
| 6 | 1/8 to 1/2 | 1/4 | \$2.00 | 18 | 1/4 to 2 | 5 | \$5.50 |
| 8 | 1/8 to 3/4 | 1/2 | 2.30 | 24 | 1/4 to 2 1/2 | 8 1/2 | 8.50 |
| 10 | 1/8 to 1 | 1 1/2 | 3.15 | 36 | 1/2 to 3 1/2 | 16 3/4 | 15.00 |
| 14 | 1/4 to 1 1/2 | 3 | 4.25 | 48 | 1 to 5 | 24 | 25.00 |

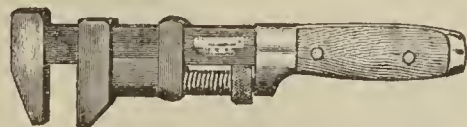
Unless otherwise specified on orders for sizes 6 to 14 inches, wood handles will be sent.

EXTRA PARTS FOR STILLSON WRENCHES



| L'gth, Ins. | Jaws | Frames | Adj. Nuts | Wood Handles | End Nuts | Pins | Frame Springs | Spring Rivets | Bars With Springs |
|-------------|--------|--------|-----------|--------------|----------|--------|---------------|---------------|-------------------|
| 6 | \$0.65 | \$0.45 | \$0.15 | \$0.23 | \$0.15 | \$0.03 | \$0.10 | \$0.01 | \$1.00 |
| 8 | .70 | .55 | .15 | .25 | .15 | .03 | .10 | .01 | 1.15 |
| 10 | 1.10 | .70 | .20 | .30 | .20 | .04 | .30 | .02 | 1.60 |
| 14 | 1.50 | .80 | .30 | .36 | .20 | .04 | .30 | .02 | 2.20 |
| 18 | 2.15 | .95 | .35 | ... | ... | .04 | .30 | .02 | 3.25 |
| 24 | 3.50 | 1.75 | .55 | ... | ... | .04 | .33 | .02 | 5.15 |
| 36 | 5.70 | 2.75 | 1.10 | ... | ... | .05 | .13 | .02 | 10.50 |
| 48 | 9.00 | 3.50 | 2.00 | ... | ... | .05 | .13 | .02 | 17.00 |

SCREW WRENCHES



Forged from tool steel; case hardened jaws; shank extends through to end of handle; polished malleable iron ferrules; steel adjusting screw; varnished hardwood grips riveted to handle with heavy iron rivets; also with steel handle which is made for heavy work and especially adapted to railroad work; the handle is internally supported and retained by cross riveting. The 12 to 21 inch sizes have ball bearing screws and extended screw support. Both types take following list:

| Length, Inches | Jaws Open, Inches | Weight per Dozen, Lbs. | Per Dozen | Length, Inches | Jaws Open, Inches | Weight per Dozen, Lbs. | Per Dozen |
|----------------|-------------------|------------------------|-----------|----------------|-------------------|------------------------|-----------|
| 6 | 1 1/8 | 9 | \$15.00 | 15 | 2 1/8 | 64 | \$38.00 |
| 8 | 1 3/8 | 16 1/2 | 18.00 | 18 | 3 1/8 | 88 | 48.00 |
| 10 | 1 7/8 | 30 | 22.00 | 21 | 4 | 121 | 58.00 |
| 12 | 2 1/4 | 40 | 28.00 | ... | ... | ... | ... |

Sizes, 15, 18 and 21, Four; All Others, Six in a Box

ADJUSTABLE WRENCHES



No. 90

RUST-PROOF

This new type angle wrench has a solid jaw, handle

and alloy steel movable jaw tempered so that they will not nick, break or wear in the gear teeth. Is made of drop forged high grade properly hardened steel.

| Size, Inches | Weight per Doz., Lbs. | Plain | Polish |
|--------------|-----------------------|--------|--------|
| 4 | 1 3/4 | \$7.80 | \$9.09 |
| 6 | 4 1/4 | 7.80 | 9.09 |
| 8 | 9 | 9.60 | 11.12 |
| 10 | 15 | 12.00 | 13.90 |
| 12 | 27 | 18.00 | 21.00 |
| 15 | 51 | ..... | 31.25 |
| 18 | 81 | ..... | 45.15 |

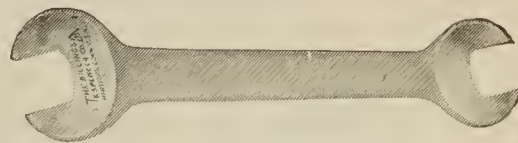
ENGINEERS WRENCHES

BILLINGS & SPENCER

15° ANGLE

Designed for general service.

Drop forged from specially selected open hearth steel and heat treated before machining. Smoothly polished and finished in Duro black rust-proof finish with heads brightened and lacquered or nickel plated.



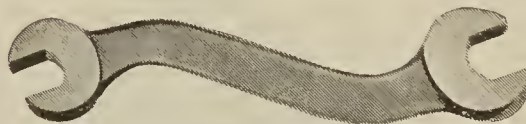
| Nos. | U. S. S. Bolt Size | Hex Head Cap Screw Size | S. A. E. Standard Screw and Nut | Milled Opening, Inches | Weight Each, Ounces | Each Black | Each Nickel |
|-------|--------------------|-------------------------|---------------------------------|------------------------|---------------------|------------|-------------|
| 1100A | ..... | ..... | ..... | 1/4-5/16 | 1 1/2 | \$0.32 | \$0.46 |
| 1104 | ..... | 3/8-1/4 | ..... | 3/8-1/8 | 2 | .42 | .64 |
| 1107 | 3/8-1/4 | ..... | ..... | 1/2-1/2 | 2 | .42 | .64 |
| 1109 | ..... | 1/4-5/16 | 1/4-5/16 | 1/2-1/2 | 3 | .50 | .76 |
| 1111 | ..... | 5/16-3/8 | 5/16-3/8 | 1/2-1/2 | 3 | .50 | .76 |
| 1112 | 1/4-5/16 | ..... | ..... | 1/2-1/2 | 3 | .50 | .76 |
| 1116 | ..... | 3/8-7/16 | 3/8-7/16 | 1/2-1/2 | 4 | .62 | .92 |
| 1118 | 5/16-3/8 | ..... | ..... | 1/2-1/2 | 6 1/2 | .62 | .92 |
| 1120 | ..... | 1/2-1/2 | 1/2-1/2 | 1/2-1/2 | 6 1/2 | .74 | 1.12 |
| 1125 | ..... | 1/2-1/2 | ..... | 1/2-1/2 | 10 | .90 | 1.36 |
| 1128 | 1/2-1/2 | ..... | ..... | 1/2-1/2 | 13 1/2 | .90 | 1.36 |
| 1133 | ..... | 5/8-3/4 | 5/8-3/4 | 1/2-1/2 | 16 | 1.10 | 1.70 |
| 1136 | ..... | ..... | ..... | 1/2-1/2 | 23 | 1.36 | 2.16 |
| 1140 | 5/8-3/4 | ..... | 3/4-7/8 | 1 1/8-1 1/4 | 28 | 1.92 | 2.80 |
| 1140X | ..... | 7/8-1 | ..... | 1 1/8-1 1/4 | 30 | 1.92 | 2.80 |

All Above, Six in a Box

Note—Nickel finish wrenches not carried in stock.

"S" WRENCHES

BILLINGS & SPENCER



22 1/2° ANGLE DOUBLE HEAD

Designed for general shop

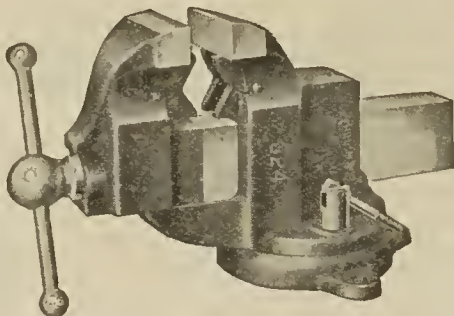
use, drop forged from specially selected open hearth steel and heat treated before machining. The openings are milled slightly larger than is listed in tables to allow for proper clearance. Smoothly polished and finished in Duro black rust-proof finish with heads brightened and lacquered or nickel plated.

| Nos. | U. S. S. Bolt Size | Hex Head Cap Screw Size | Milled Opening, Inches | Length, Inches | Weight Each, Lbs. | Each Black | Each Nickel |
|------|--------------------|-------------------------|------------------------|----------------|-------------------|------------|-------------|
| 1401 | 1/8-3/16 | ..... | 5/16-1/4 | 4 | 1 1/8 | \$0.44 | \$0.64 |
| 1402 | 1/8 | 1/8-1/4 | 5/16-1/4 | 4 | 1 1/8 | .44 | .64 |
| 1404 | ..... | 1/4-1/4 | 3/8-1/4 | 4 | 1 1/8 | .44 | .64 |
| 1409 | -1/4 | 1/4-1/4 | 1/2-1/2 | 5 | 1 1/8 | .58 | .84 |
| 1411 | 1/4 | 5/16-3/8 | 1/2-1/2 | 5 | 1 1/8 | .58 | .84 |
| 1413 | 1/4 | 5/16-7/16 | 1/2-5/8 | 5 | 1 1/8 | .58 | .84 |
| 1417 | ..... | 3/8-1/2 | 1/2-3/4 | 6 1/4 | 3/8 | .78 | 1.12 |
| 1421 | ..... | 7/16-9/16 | 5/8-1 1/8 | 6 1/4 | 3/8 | .78 | 1.12 |
| 1433 | 1/2 | 5/8-3/4 | 7/8-1 | 9 | 1 | 1.44 | 2.00 |
| 1442 | -3/4 | 7/8-1 | 1 1/8-1 1/4 | 10 1/2 | 1 1/8 | 2.00 | 2.70 |

COMBINATION PIPE VISES

STATIONARY
JAW
SWIVEL BASE

A heavy duty vise of rugged construction, the jaws are made heavier than the regular vise in order to withstand the strain of pipe work, and are made of selected tool steel, machined from the solid bar hardened and tempered, and can easily be replaced when necessary. With the swivel base this vise can be quickly and positively locked at any desired angle.

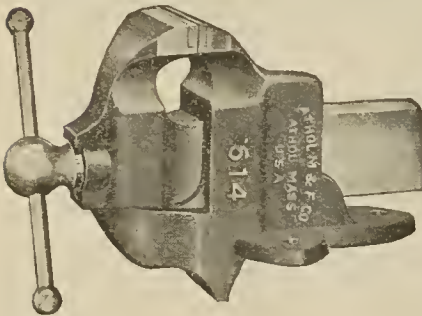


| Nos. | Width Jaws, Inches | Jaws Open, Inches | Capacity, Pipe, Inches | Weight Each, Lbs. | Each |
|------|--------------------|-------------------|------------------------|-------------------|---------|
| 324 | 4 | 5½ | ⅛ to 2½ | 54 | \$22.75 |
| 324½ | 4½ | 6 | ⅛ to 3½ | 76 | 27.75 |

BENCH VISES

STATIONARY BASE
AND JAW

Cast from special semi-steel selected for high tensile and compressive strength with elasticity; tool steel jaws machined, tempered and drawn in oil; welded to face in casting, buttress thread superior steel screws with cast iron ball head welded on. Malleable iron nut is removable.

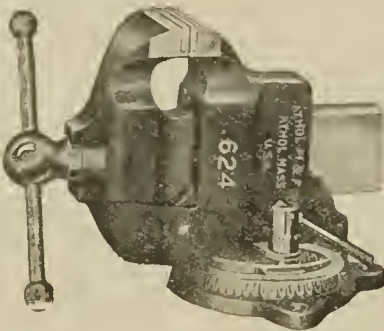


| Nos. | Width Jaws, Inches | Jaws Open, Inches | Weight Each, Lbs. | Each |
|------|--------------------|-------------------|-------------------|--------|
| 612½ | 2½ | 3½ | 12½ | \$9.45 |
| 613 | 3 | 4¼ | 22 | 10.50 |
| 613½ | 3½ | 5 | 29 | 11.85 |
| 614 | 4 | 6 | 44 | 13.40 |
| 614½ | 4½ | 6½ | 62 | 16.30 |
| 615 | 5 | 7½ | 80 | 21.00 |
| 615½ | 5½ | 8¾ | 105 | 31.50 |
| 616 | 6 | 10 | 146 | 41.00 |
| 617 | 7 | 12½ | 203 | 57.75 |
| 618 | 8 | 12½ | 260 | 61.25 |

BENCH VISES

SWIVEL BASE
STATIONARY JAW

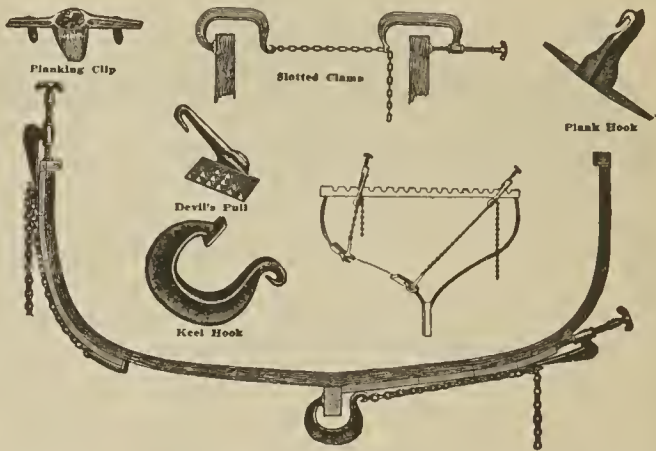
Swivel base is made with corrugated runways and clamp bolt head; positively locking in any position by slight pressure of clamp bolt; material and construction same as stationary vise above.



| Nos. | Width Jaws, Inches | Jaws Open, Inches | Weight Each, Lbs. | Each |
|-------|--------------------|-------------------|-------------------|---------|
| *622¼ | 2¼ | 2 | 7 | \$11.00 |
| 622½ | 2½ | 3½ | 16 | 12.60 |
| 623 | 3 | 4¼ | 27 | 13.65 |
| 623½ | 3½ | 5 | 34 | 15.75 |
| 624 | 4 | 6 | 54 | 17.85 |
| 624½ | 4½ | 6½ | 65 | 21.00 |
| 625 | 5 | 7½ | 91 | 31.50 |
| 625½ | 5½ | 8¾ | 120 | 39.90 |
| 626 | 6 | 10 | 173 | 54.60 |
| 627 | 7 | 12½ | 240 | 73.50 |
| 628 | 8 | 12½ | 300 | 102.90 |

*Note—Number 622¼ made with smooth-faced jaws.

BOAT BUILDERS CHAIN CLAMPS



Made of best malleable iron and specially designed for boat builders use; making a very convenient set of clamps for use in planking, etc. Made in two sizes, the larger size suitable for planking ⅞ inch thick and upward and a 6 inch keel the small size for all planking under ⅞ inch and up to 5 or 6 inches wide or a keel 4 inches thick.

- A set includes the following items.
- One screw.
 - One chain.
 - One planking hook.
 - One keel hook.

The other fittings being considered as extra and charged accordingly.

- Small size has 3½ feet of chain.
Large size has 4 feet of chain.

| Name | Each |
|-------------------------|--------|
| Small Set Complete | \$5.40 |
| Large Set Complete | 9.00 |
| Slotted Clamp, 9 Inches | 3.60 |
| Devils Pull | 2.25 |
| Small Planking Clip | .75 |
| Large Planking Clip | 1.25 |

MALLEABLE SCREW CLAMPS

STANDARD

Made of best grade malleable iron, heavily reinforced and so shaped as to give greatest strength for the metal used.

Large diameter steel screw with acme thread and with proper pitch to give greatest power; long bearing.



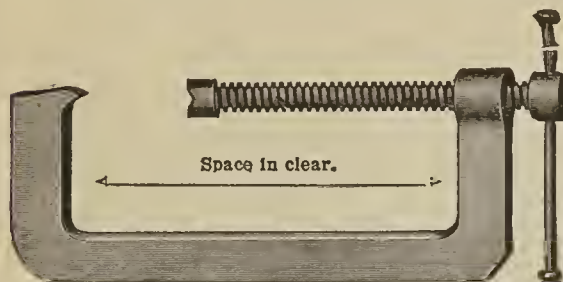
| Nos. | Opening, Inches | Depth from Center of Screw, Inches | Weight per Dozen, Lbs. | Per Dozen |
|------|-----------------|------------------------------------|------------------------|-----------|
| 536 | 2½ | 1¾ | 7½ | \$7.00 |
| 537 | 3 | 1⅞ | 9¾ | 8.00 |
| 538 | 4 | 2⅞ | 18 | 11.00 |
| 539 | 5 | 2½ | 22 | 14.00 |
| 540 | 6 | 2¾ | 27 | 18.00 |
| 541 | 7 | 3 | 36 | 22.00 |
| 542 | 8 | 3¼ | 44 | 28.00 |
| 544 | 10 | 3⅝ | 64½ | 36.00 |
| 545 | 12 | 3⅝ | 89 | 46.00 |

SCREW CLAMP TIPS

| Clamp | Nos. | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 544 | 545 |
|----------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Per Doz. | | \$0.40 | \$0.40 | \$0.50 | \$0.50 | \$0.50 | \$1.20 | \$1.20 | \$2.00 | \$2.00 |

We can furnish complete marine railway equipment for large and small boat yards. Our plans and specifications will be sent to you upon request.

SHIP SCREW CLAMPS



Made of wrought iron. Tool steel screws. Full cut threads. Long sliding steel handle bar in screw head.

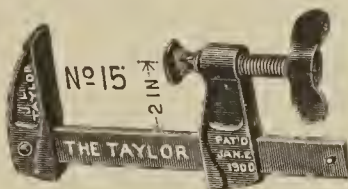
| Nos. | Size of Frame, Inches | Diameter of Screw, Inches | Space in Clear, Inches | Weight Each, Lbs. | Each |
|------|-----------------------|---------------------------|------------------------|-------------------|---------|
| 1 | 5 x 1½ | 2½ | 36x10 | 200 | \$93.00 |
| 3 | 4 x 1 | 1¾ | 30x 8 | 85 | 50.00 |
| 5 | 3½ x ¾ | 1¾ | 24x 7 | 50 | 34.00 |
| 7 | 3 x ⅝ | 1½ | 18x 5 | 29½ | 29.00 |
| 20 | 2¼ x ⅝ | 1½ | 16x 4 | 20¾ | 23.50 |
| 30 | 2 x ½ | 1¼ | 14x 4 | 12½ | 19.50 |
| 40 | 1¾ x ½ | 1¼ | 12x 3½ | 10½ | 18.50 |

STEEL BAR CLAMPS

QUICK ADJUSTING—SELF LOCKING

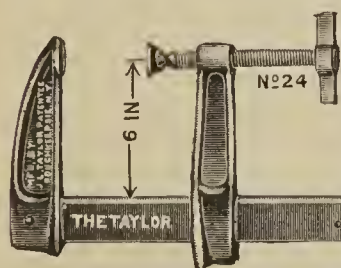
Style No. 15

Bar made of a special grade of steel. Sliding arm and head made of malleable iron; full cut threads. Size of bar, 1 inch wide, ⅝ inch thick; size of screw, 4 inches long, ⅝ inch diameter.



Clamping Strain 1800 Pounds

| Opens, Inches | Weight per Dozen, Lbs. | Per Dozen | Opens, Inches | Weight per Dozen, Lbs. | Per Dozen |
|---------------|------------------------|-----------|---------------|------------------------|-----------|
| 4 | 26 | \$20.90 | 18 | 41 | \$24.65 |
| 6 | 28 | 21.45 | 24 | 47 | 25.30 |
| 8 | 30 | 21.95 | 30 | 53 | 27.90 |
| 10 | 32 | 22.50 | 36 | 60 | 29.50 |
| 12 | 36 | 23.05 | 48 | 72 | 32.75 |



Style No. 24

Designed especially for boat and launch building and all classes of work requiring deep engagement. Size of bar, 1¼ inches wide, ⅝ inch thick; size of screw, 7½ inches long, ¾ inch diameter.

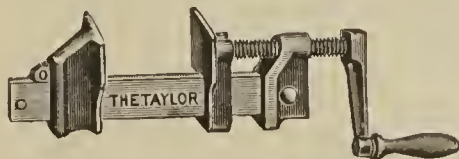
Clamping Strain 2100 Pounds

| Opens, Inches | Weight per Dozen, Lbs. | Per Dozen | Opens, Inches | Weight per Dozen, Lbs. | Per Dozen |
|---------------|------------------------|-----------|---------------|------------------------|-----------|
| 6 | 79 | \$46.80 | 18 | 101 | \$55.45 |
| 8 | 83 | 48.24 | 24 | 112 | 59.55 |
| 10 | 86 | 49.65 | 30 | 123 | 64.10 |
| 12 | 90 | 51.10 | 36 | 135 | 68.40 |

CARPENTERS

Style No. 25

Bar made of a special grade of steel, sliding arm made of malleable iron. Full cut special threads. Clamping surface, 2x1¾ inches; size of bar, 1½ inches wide, ¼ inch thick; size of screw, 6½ inches long, ⅝ inch diameter.



Clamping Strain 7500 Pounds

| Opens, inches | Weight per Dozen, Lbs. | Per Dozen | Opens, Inches | Weight per Dozen, Lbs. | Per Dozen |
|---------------|------------------------|-----------|---------------|------------------------|-----------|
| 2 | 87 | \$47.65 | 4 | 129 | \$56.30 |
| 2½ | 99 | 49.80 | 5 | 144 | 60.60 |
| 3 | 114 | 52.00 | 6 | 147 | 64.95 |

DREDGE RINGS



Sizes

¾x1¼
¾x1½
¾x1¾
¾x2
.....

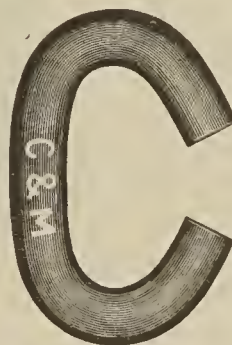
¾x1¼
¾x1½
¾x1¾
¾x2
.....

¾x1¼
¾x1½
¾x1¾
¾x2
.....

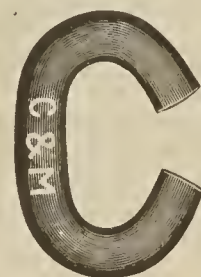
¾x1¼
¾x1½
¾x1¾
¾x2
.....

DREDGE LINKS

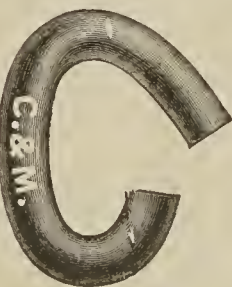
STEEL



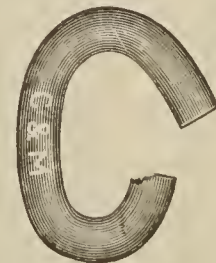
No. 0 Link.....per lb.



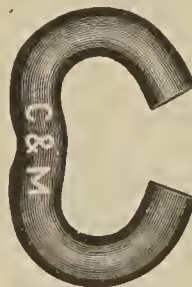
No. 1 Link.....per lb.



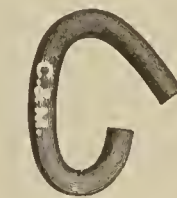
No. 2 Link.....per lb.



No. 3 Link.....per lb.



No. 1 Light Link....per lb.



No. 5 Link.....per lb.

Sizes: Nos. 0, 1, 2, 3, 4, 5

No. 1 Light

Link Pliers can be furnished for above

All Above. Prices Upon Application

HYDRAULIC JACKS

OILJAK



Require little effort to raise capacity load; ram responds immediately when pumping handle up and down and holds the load or lowers to any point desired. Recommended especially for shipyard and marine railway use. For best results the lightest oil obtainable should be used in refilling the jack. Stands up under the hardest working conditions without attention. Height lowered, 9, 10, 11 inches respectively; height raised, 14, 15, 17 inches respectively. Furnished with 18-inch handle.

No. JB5—Capacity 5 Tons..\$26.00
No. JB10—Capacity 10 Tons.. 35.00
No. JB20—Capacity 20 Tons.. 50.00

CAPACITY 3 TONS

Require little effort to raise a capacity load with one hand; ram responds immediately when pumping the handle up and down and holds the load or lowers same at any point desired. Designed especially for boat storage yards. For best results only the lightest body oil should be used. Furnished with 18 inch handle. Height lowered, 9 inches; height raised, 14 inches.

No. JB3—Capacity, 3 Tons; Wgt.
Each, 12 Lbs.\$16.50



JACK SCREWS

BELL BASE



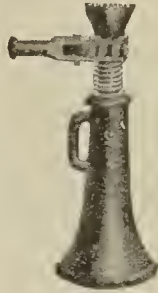
Are best adapted for extra heavy duty. Have one-piece wrought steel screws, cast iron bases with forged heads and cast iron caps. Levers will be sent only when ordered and will be charged for extra.

| Diameter Screw, Inches | Height Stand, Inches | Capacity, Tons | Height Overall, Inches | Rise of Screws, Inches | Weight Each, Lbs | Each |
|------------------------|----------------------|----------------|------------------------|------------------------|------------------|--------|
| 1 1/4 | 4 | 10 | 6 1/2 | 2 1/4 | 8 | \$2.90 |
| 1 1/4 | 6 | 10 | 8 1/2 | 4 1/4 | 10 | 3.10 |
| 1 1/4 | 8 | 10 | 10 1/2 | 6 1/4 | 12 | 3.40 |
| 1 1/2 | 4 | 12 | 6 3/4 | 1 3/4 | 9 | 3.25 |
| 1 1/2 | 6 | 12 | 8 3/4 | 3 3/4 | 11 1/2 | 3.75 |
| 1 1/2 | 8 | 12 | 10 3/4 | 5 3/4 | 14 | 4.25 |
| 1 1/2 | 10 | 12 | 12 3/4 | 7 3/4 | 17 | 4.75 |
| 1 3/4 | 6 | 16 | 9 | 3 1/2 | 14 | 4.50 |
| 1 3/4 | 10 | 16 | 13 | 7 1/2 | 20 | 5.75 |
| 1 3/4 | 12 | 16 | 15 | 9 1/2 | 25 | 6.25 |
| 2 | 6 | 20 | 9 1/2 | 3 | 19 | 5.25 |
| 2 | 8 | 20 | 11 1/2 | 5 | 23 | 6.00 |
| 2 | 10 | 20 | 13 1/2 | 7 | 26 | 6.75 |
| 2 | 12 | 20 | 15 1/2 | 9 | 30 | 7.50 |
| 2 1/4 | 6 | 24 | 9 3/4 | 2 3/4 | 22 | 7.00 |
| 2 1/4 | 8 | 24 | 11 3/4 | 4 3/4 | 26 | 7.50 |
| 2 1/4 | 10 | 24 | 13 3/4 | 6 3/4 | 30 | 8.25 |
| 2 1/4 | 12 | 24 | 15 3/4 | 8 3/4 | 34 | 9.00 |
| 2 1/2 | 6 | 28 | 10 | 2 1/4 | 27 | 7.75 |
| 2 1/2 | 8 | 28 | 12 | 4 1/4 | 31 | 8.75 |
| 2 1/2 | 10 | 28 | 14 | 6 1/4 | 35 | 9.75 |
| 2 1/2 | 12 | 28 | 16 | 8 1/4 | 40 | 10.75 |
| 3 | 8 | 36 | 13 | 3 1/2 | 46 | 17.50 |
| 3 | 14 | 36 | 19 | 9 1/2 | 58 | 19.50 |
| 3 | 16 | 36 | 21 | 11 1/2 | 68 | 20.75 |
| 3 | 18 | 36 | 23 | 13 1/2 | 78 | 22.00 |
| 3 | 20 | 36 | 25 | 15 1/2 | 84 | 23.25 |
| 3 | 22 | 36 | 27 | 17 1/2 | 91 | 24.50 |
| 3 | 24 | 36 | 29 | 19 1/2 | 103 | 25.75 |

Note—In ordering use figures shown in first and second columns

JACK SCREWS

RATCHET TYPE—BELL BASE

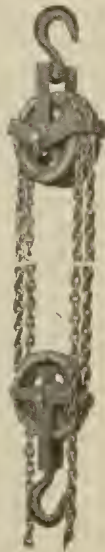


Have one-piece wrought steel screws with cut threads, cast iron stands and caps, steel ratchet pawls and heavy malleable iron handle sockets. Levers will be sent only when ordered and will be charged for extra.

| Screw Size, Inches | Height of Stand, Inches | Height Overall, Inches | Capacity, Tons | Rise Screw, Inches | Weight Each, Lbs | Each |
|--------------------|-------------------------|------------------------|----------------|--------------------|------------------|---------|
| 2 x12 | 8 | 12 1/2 | 24 | 5 | 27 1/2 | \$16.00 |
| 2 x14 | 10 | 14 1/2 | 24 | 7 | 32 | 16.75 |
| 2 x16 | 12 | 16 1/2 | 24 | 9 | 34 | 17.50 |
| 2 1/4 x12 | 8 | 12 1/2 | 28 | 4 3/4 | 30 | 18.00 |
| 2 1/4 x14 | 10 | 14 1/2 | 28 | 6 3/4 | 35 | 19.00 |
| 2 1/4 x16 | 12 | 16 1/2 | 28 | 8 3/4 | 38 | 20.00 |
| 2 1/4 x18 | 14 | 18 1/2 | 28 | 10 3/4 | 42 | 21.00 |
| 2 1/4 x20 | 16 | 20 1/2 | 28 | 12 3/4 | 47 | 22.00 |
| 2 1/2 x12 | 6 | 11 1/2 | 32 | 2 1/4 | 37 | 19.50 |
| 2 1/2 x14 | 8 | 13 1/2 | 32 | 4 1/4 | 41 | 20.50 |
| 2 1/2 x16 | 10 | 15 1/2 | 32 | 6 1/4 | 44 2/3 | 21.50 |
| 2 1/2 x18 | 12 | 17 1/2 | 32 | 8 1/4 | 48 1/2 | 22.50 |
| 2 1/2 x20 | 14 | 19 1/2 | 32 | 10 1/4 | 53 | 23.50 |
| 2 1/2 x22 | 16 | 21 1/2 | 32 | 12 1/4 | 56 | 24.50 |
| 2 1/2 x24 | 18 | 23 1/2 | 32 | 14 1/4 | 64 | 25.50 |
| 2 1/2 x26 | 20 | 25 1/2 | 32 | 16 1/4 | 70 | 26.50 |
| 3 x20 | 14 | 20 | 40 | 9 1/2 | 74 | 32.00 |
| 3 x24 | 18 | 24 | 40 | 13 1/2 | 84 | 35.00 |
| 3 x26 | 20 | 26 | 40 | 15 1/2 | 93 | 37.00 |
| 3 x28 | 22 | 28 | 40 | 17 1/2 | 101 | 38.50 |
| 3 x30 | 24 | 30 | 40 | 19 1/2 | 104 | 40.00 |
| 3 x36 | 30 | 36 | 40 | 25 1/4 | 122 | 48.00 |

CHAIN HOISTS

DIFFERENTIAL



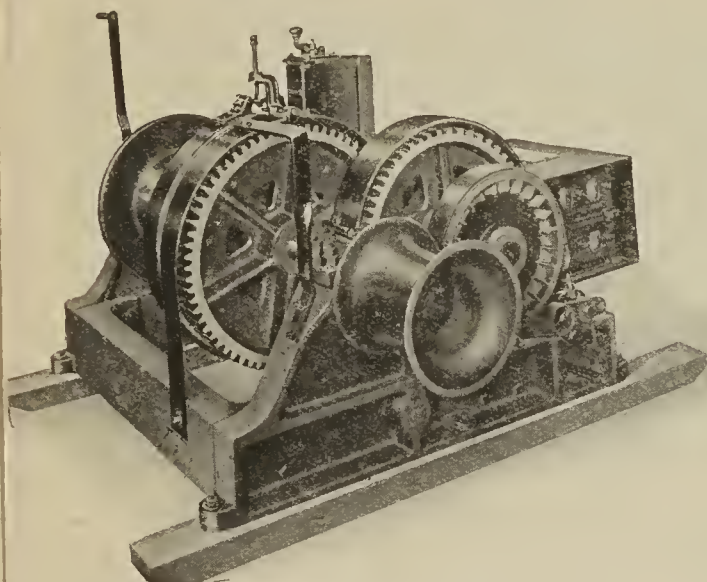
An occasional service block where comparatively light loads are to be handled at rare intervals. The overhaul of hand chain is small but the pull is hard. Hoist is easily handled and where men are available for emergency or occasional work especially in the smaller sizes, it is a desirable block. Holds the load at any point.

It has few parts and is low in cost. Chain is accurate fitting steel chain; wheels are large, smoothly cast, semi-steel, meshing perfectly with the chain. Hooks are drop forgings, heat treated. The parts throughout are carefully machined. Hoists are packed in separate boxes and are shipped with standard length lift unless otherwise specified. All parts are interchangeable.

| Cap., Tons | Regular Lift, In Feet | Minimum Distance Between Hooks, Inches | Chain Pull, Lbs | Chain Pull, Feet | Total Lineal Feet of Endless Chain | Wgt. Each, Lbs. | Each | *Extra Lbt. per Foot |
|------------|-----------------------|--|-----------------|------------------|------------------------------------|-----------------|---------|----------------------|
| 1/4 | 6 | 17 | 72 | 18 | 22 | 24 | \$36.00 | \$4.80 |
| 1/2 | 7 | 21 | 110 | 24 | 26 | 31 | 42.00 | 4.80 |
| 1 | 8 | 26 | 190 | 30 | 30 | 51 | 56.00 | 5.00 |
| 1 1/2 | 8 1/2 | 32 | 225 | 36 | 33 | 81 | 72.00 | 5.40 |
| 2 | 9 | 39 | 300 | 42 | 36 | 121 | 90.00 | 5.60 |
| 3 | 9 1/2 | 44 | 557 | 38 | 38 | 179 | 120.00 | 6.00 |

*Each Foot of Extra Lift Includes 4 Feet of Chain.

ELECTRIC DRIVEN MARINE RAILWAY WINCH



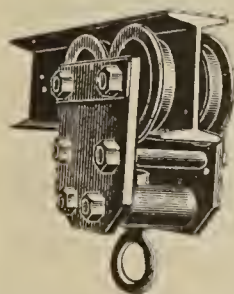
This machine is capable of handling a ten-ton boat, plus one ton for the carriage, or a total of eleven tons up a ten degree grade, using a two-part line. This will mean dead-ending the block on the carriage and dead-ending the wire rope at some convenient point in the shipyard.

5 H.P. Intermittent duty single friction drum electric hoist, complete with General Electric squirrel cage type motor with suitable starter for 220 volts, 3 phase, 60 cycle, customer to do all wiring between motor and starting equipment; drum will be made 9 inches in diameter by 18 inches long.

Designed for line pull of 2500 pounds at an average rope speed of 25 feet per minute, allowing 5 layers of 1/2-inch cable on drum, or the equivalent of 460 feet. This machine to be equipped with a niggerhead on each end of drum shaft; footbrake on drum; triple gearing; standard side lever operation.

Complete\$900.00

STEEL PLATE TROLLEYS



An overhead I-beam track fitted with a trolley and chain hoist provides one of the simplest and most economical methods for handling of heavy materials. The trolley is an important part of this equipment. These trolleys are ruggedly constructed and have a wide margin of safety beyond their rated capacities. They are fitted with roller bearings and operate smoothly and easily along the beam.

| Capacity, in Tons | —For Standard I-Beam— Size, Inches | Weight, Lbs. | Smallest Radius Curve, Inches | Net Weight, Lbs. | Each |
|-------------------------|--|-----------------|-------------------------------------|------------------------|---------|
| 1/2 | 6 | 12.5 | 38 | 39 | \$27.00 |
| 1 | 6 | 12.5 | 42 | 50 | 32.00 |
| 1 1/2 | 7 | 15.3 | 48 | 76 | 42.00 |
| 2 | 8 | 18.4 | 52 | 81 | 54.00 |
| 3 | 9 | 21.8 | 84 | 116 | 66.00 |
| 4 | 10 | 25.4 | 84 | 125 | 74.00 |
| 5 | 12 | 31.8 | 98 | 212 | 86.00 |

Can be furnished for any size I-Beam.

Trolleys of greater capacity can be furnished. Prices on application.

WALL WINCHES

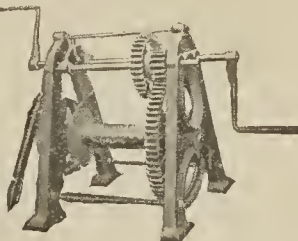


For use in boat and repair shops, machine shops, also for raising and lowering heavy electric light fixtures in churches and public buildings. Is worm-gearred, making it impossible for the load to run down of its own accord. Both raising and lowering are under control of the crank or handle.

| Capacity, Lbs. | Size of Drum, Inches | Weight Each, Lbs. | Each |
|-------------------|-------------------------|----------------------|---------|
| 500 | 5 1/2 x 6 | 45 | \$24.00 |
| 750 | 5 1/2 x 6 | 65 | 30.00 |

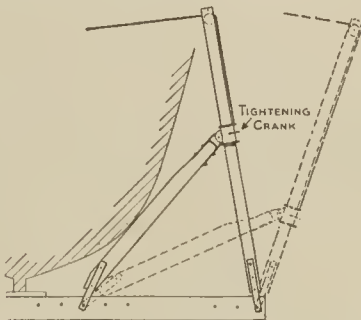
DERRICK WINCHES DOUBLE PURCHASE

For manila rope, wire rope or chain. Are constructed for heavy duty work. Can be operated by power where a shafting is accessible by fitting them with a tight and loose pulley. Has steel sides with cast iron drum and gears. Furnished with brake and two crank lever handles.



| Nos. | *Capacity, Tons | Size of Drums, Inches | Weight Each, Lbs. | Each With Brake | Each Without Brake |
|------|--------------------|-----------------------------|-------------------------|-----------------------|--------------------------|
| 10 | 4 | 18x5 | 400 | \$80.00 | \$70.00 |
| 11 | 5 | 22x6 | 450 | 92.00 | 80.00 |
| 12 | 6 | 22x6 | 600 | 118.00 | 100.00 |
| 13 | 9 | 26x6 | 800 | 138.00 | 120.00 |
| 14 | 12 | 26x6 | 1020 | 164.00 | 146.00 |
| 15 | 15 | 30x6 | 1270 | 225.00 | 205.00 |
| 16 | 18 | 30x6 | 1325 | 280.00 | 252.00 |
| 17 | 24 | 30x6 | 1350 | 360.00 | 320.00 |

BILGE SUPPORTS



These adjustable bilge frames have a range of movement that will fit almost any shape of boat. They save much time in hauling out boats, all lengths up to 60 feet and not over 60-70 tons weight. They are quickly applied and will fit most boats without any change of blocks. We furnish iron bolts, sheaves and blueprints, everything except the timber. Drawing illustrates method of adjustment.

No. 2—Bilge Supports\$75.00 Pair

RAIL

Second hand, straight rails in thirty foot lengths can be furnished in most standard sizes.

| Rail, Weight per Yard, Lbs. | Height, Inches | Width of Face, Inches | Width of Base, Inches |
|-----------------------------------|-------------------|-----------------------------|-----------------------------|
| 30 | 3 1/8 | 1 11/16 | 3 1/8 |
| 35 | 3 5/16 | 1 3/4 | 3 5/16 |
| 56 | 4 | 2 5/16 | 3 15/16 |
| 70 | 4 5/8 | 2 7/16 | 4 5/8 |
| 90 | 5 3/8 | 2 5/8 | 5 3/8 |

Prices Upon Application

RAILROAD TRACK SPIKES

Reversed points; size 1 1/2 x 5 1/2 inches; suitable for 56-100 pound rails in 200 pound kegs. About 320 spikes per keg. Per 100 Pounds\$5.50

SIMPLICITY BOAT HOISTS



Single type hoist, equipped with double ropes and pulleys for boats under 4,000 lbs.

A splendid device for raising a boat from the water when not in use. It is the best friend a boat ever had. Takes less time than to effect an average mooring. Protects your boat from rubbing against dock, change of tides or "wash" from passing boats. Keeps boat free of marine growths and protects it from absorption of water in hull, insuring better performance. Provides a simple one-man method of hauling boat out at end of season. Makes repairs to shaft, propeller, hull, etc., easy. Designed for raising and lowering boats up to 6,000 lbs. As illustrated, either single or double hoists can be attached to overhead beams of boat house or, if these are not available, to other supports set up. Canvas cover may be stretched over hoists to provide a boat shelter if desired.

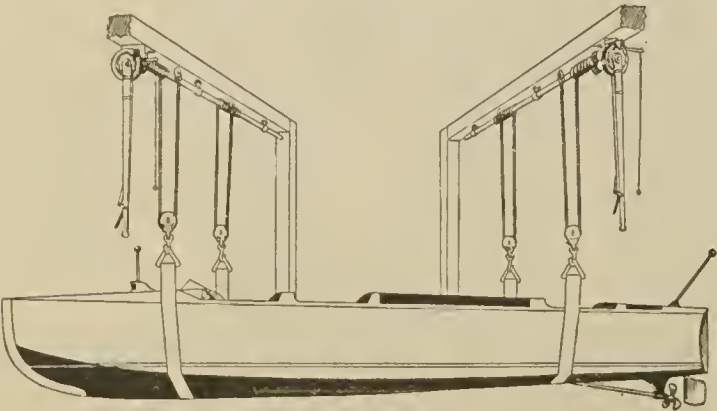
Operation—Boat is raised by back and forward movement of hand lever which operates the double gears turning the shaft. Lowering either by means of hand lever ratchet or powerful brake. Simple and safe in operation.

Installation—Sketches and detail will be furnished showing various types of installations. Hoists are shipped semi-assembled and can be attached to overhead timbers in a few hours' time.

With the SIMPLICITY BOAT HOIST you can raise your boat from the water in a few minutes; simply drive your boat over the broad rubberized canvas slings, or if boat is equipped with lifting rings, attach hooks to same, give ratchet lever a few pushes and in less time than it takes to tie up, boat is clear of the water.

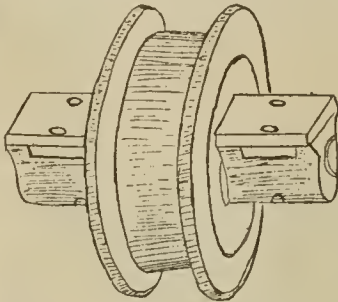
The Single Hoist is designed for boats equipped with lifting rings. Handles boats up to 3,000 lbs. with single cables. Double cables recommended for weights over this. Lifting capacity of both single and double hoists can be doubled by use of special pulley blocks on each cable.

| | |
|-----------------------------|----------|
| Single Hoist Complete | \$110.00 |
| Double Hoist Complete | 225.00 |



For boats up to 8,000 lbs., equipped with pulleys and brakes.

WHEELS AND WHEEL TRUCKS
FOR MARINE RAILWAY CARRIAGES



DOUBLE FLANGED

Double flanged cast iron wheels with bore recessed for grease storage. Wheels have chilled treads. Trucks are machined and drilled, ready for bolting to the railway carriage. Machined axle.

For 20 to 35 pound ASCE rail.

| Diam. Wheel on Tread, Inches | Width of Tread, Inches | Length of Hub, Inches | Diam. Hub, Inches | Size of Bearing Box, Inches | Carrying Capacity, Lbs. | Weight Each, Lbs. | Each |
|------------------------------|------------------------|-----------------------|-------------------|-----------------------------|-------------------------|-------------------|---------|
| 6 | 2 5/8 | 5 1/2 | 4 | 4x7 1/4 | 7,500 | 106 | \$16.75 |
| 8 | 2 5/8 | 5 1/2 | 4 1/2 | 4x8 1/4 | 9,500 | 183 | 25.95 |
| 9 | 2 5/8 | 6 | 5 | 9 | 10,000 | 225 | 30.00 |
| 10 | 3 | 6 | 6 | 9 3/4 | 11,500 | 280 | 35.00 |
| 12 | 3 | 6 | 7 | 10 1/2 | 13,500 | 350 | 41.25 |

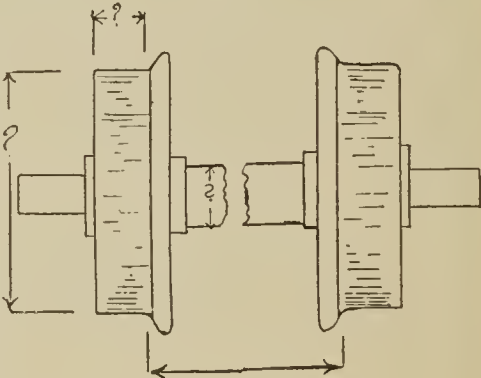
DOUBLE FLANGED WHEELS ONLY

| Diameter Wheel on Tread, Ins. | Weight Each, Lbs. | Each |
|-------------------------------|-------------------|--------|
| 6 | 40 | \$7.50 |
| 8 | 70 | 11.85 |
| 9 | 85 | 13.75 |
| 10 | 100 | 15.65 |
| 12 | 140 | 17.50 |

SINGLE FLANGE WHEELS

Diagram Showing Dimensions Required When Ordering

These single flange wheels have chilled treads and are not carried in stock bored or with hubs faced. Prices for boring for any size axle and for facing hubs, one side, are specified below.



| Nos. | Diam., Inches | Width Tread, Inches | Length of Hub, Inches | Diameter of Hub, Inches | Approx. Weight, Lbs. Each | Each |
|------|---------------|---------------------|-----------------------|-------------------------|---------------------------|--------|
| 8A | 8 | 3 | 4 7/8 | 3 3/4 | 40 | \$5.50 |
| 10A | 10 | 2 1/4 | 2 5/8 | 2 1/4 | 40 | .... |
| 10C | 10 | 2 1/2 | 4 | 3 3/4 | 50 | 6.50 |
| 10E | 10 | 2 1/2 | 3 5/8 | 4 1/2 | 50 | .... |
| 12F | 12 | 3 | 3 1/2 | 3 3/4 | 60 | .... |
| 12E | 12 | 3 1/8 | 4 3/4 | 4 1/2 | 70 | 8.50 |
| 12I | 12 | 3 | 5 | 3 5/8 | 75 | .... |

EXTRA FOR BORING

| | |
|--------------------------------------|------------------|
| For Any Diameter Axle | Per Wheel \$1.00 |
| EXTRA FOR FACING HUB—ONE SIDE | |
| For Any Size Wheel, Either Face..... | \$0.50 |

AXLES

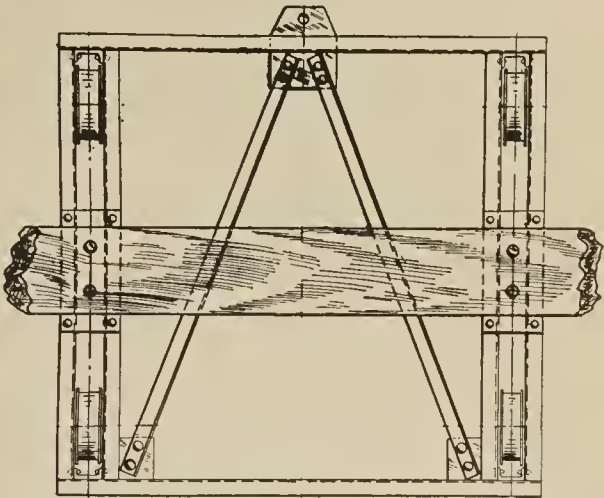
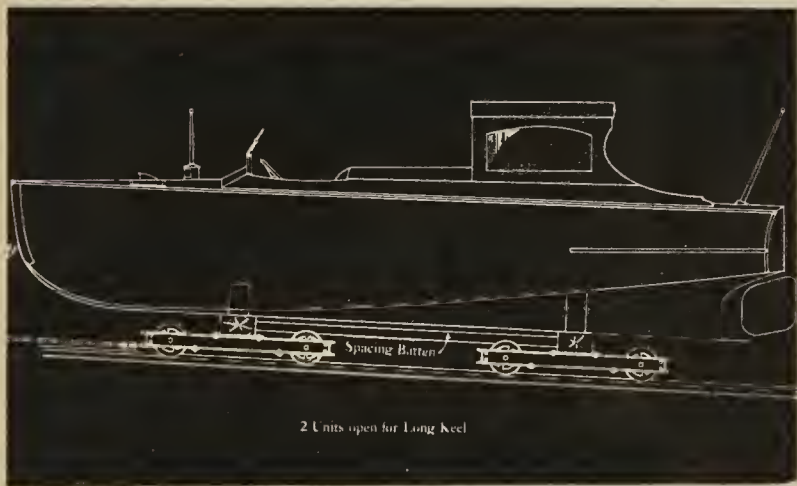
| | |
|---|----------------------|
| Square or Round Axles, All Sizes..... | Per Pound \$0.07 1/4 |
| Wheels pressed onto axles, including grinding of axles for either inside or outside bearing boxes per pair, \$2.50. | |
| Note—Allow 1 1/2 to 4 inches on each side, according to axle diameter, if outside bearing boxes are desired. | |

HEAVY BEARING BOXES

With flat face plates and bolt holes for bolting to timbers of cradle frame. All boxes are provided with grease cups.

| For Axle Diameter, Inches | Each | For Axle Diameter, Inches | Each |
|---------------------------|--------|---------------------------|--------|
| 1 1/2 | \$3.00 | 2 1/2 | \$5.25 |
| 2 | 4.25 | 3 | 5.75 |

BOAT CRADLE UNITS



Meet all the needs of boat yards where many small boats of various types and shapes are brought in for dry docking and storage. Can be adapted to haul out yachts of various weights, length and shape of keels by the use of two or more of the units spaced any distance apart as needed. Their light weight allows them to be moved easily from one track to another.

Each unit consists of the steel frame and its four wheels all fitted together; no wood work or bilge supports are included.

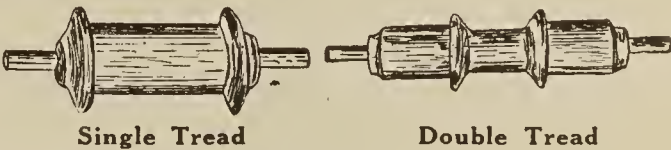
Wheels are double flanged for weight of rail specified in the listing below. If it is desired to run units on a heavier rail, special double flanged, 10-inch wheels can be substituted at a small additional cost. Ten-inch wheels increase the height above the rail by 1 inch. Also the gauge of track can be increased to any width desired greater than listed at small extra cost. Two of the units illustrated make a very efficient carriage which is adjustable by means of one or two battens or spacing timbers to the keel length of any boat within their weight capacity.

| Unit Nos | Carrying Capacity Tons | Diameter Wheel Tread Inches | For Size ASCE Rail, Lbs | Largest Size ASCE Rail for Std. Wheel, Lbs. | Standard Gauge of Track, C. to C., Inches | Top of Steel Frame Above Rail, Inches | Weight Each, Lbs. | Per Unit | |
|----------|------------------------|-----------------------------|-------------------------|---|---|---------------------------------------|-------------------|----------|------------|
| | | | | | | | | Black | Galvanized |
| 2 | 3-4 | 8 | 25 | 30 | 54 | 6½ | 580 | \$95.00 | \$105.00 |
| 3 | 5-6 | 8-9 | 30 | 35 | 60 | 7 | 680 | 105.00 | 115.00 |

Prices of Unassembled Units—Given Upon Application

MARINE RAILWAY ROLLERS
CAST IRON

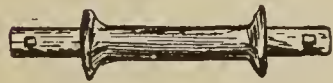
For use with all sizes of marine railways regardless of the size of vessels to be hauled. The economic safe load that these rollers can carry can be easily determined by dividing the total weight of the vessel and carriage by the smallest number of rollers under the carriage at any one time. If the load greatly exceeds the weight specified in the listing, the wear on the rollers will be very rapid. Every roller is hammer tested for soundness and carefully gauged for size and accuracy. Unless otherwise specified, pintles are of mild steel, cast in.



Prices Upon Application

Note.—Roller specifications and prices upon application. We have scores of patterns for rollers of other dimensions in both patterns. We can supply any dimension rollers without pattern charge if the order contains two tons or more in weight.

SPREADERS



A sufficient number of spreaders should be included in each order for rollers. Spreaders must be kept keyed up tight and rollers square with the track. Loose spreaders permit rollers to get out of square with the track, considerably increasing the cradle friction and subsequent load on the hauling gear. Price Upon Application.

STANDARDIZED YACHT RAILWAYS

Information Required

It is almost impossible to quote definite prices on standardized yacht railways due to the fact that the grade of the desired railway varies with the location of the particular site and the length of tract varies according to the length required inshore. For that reason, the following information is required for the quotation of a definite price.

- 1. State size of railway required. (i.e. weight and length, maximum of boats handled.)
- 2. What is natural grade of site? (In determining this, be sure to take profile of the land both below and above the water. If unable to determine grade, plot soundings on a profile chart.)
- 3. What depth of water is desired at high water over the cradle logs. (Dimension A)?
- 4. What height above water to top of aft log, (Dimension C) is desired? If this question is not answered, we will use a distance of two feet.
- 5. What kind of power available? If electric, state current characteristics.
- 6. State length available, out, from the high water mark.
- 7. State length available inland from high water mark.



Note—These railways can also be operated by wire rope hoist if preferred, though the chain hoist is strongly recommended. For a wire rope hoist, the down-haul is simply a manila rope operating on a winch head on the hoist.

“SNIPE” SAIL BOAT HARDWARE

For your convenience and in the hope that it will prove of assistance to you in being of service, we have compiled a suggested List of Fittings suitable for outfitting a Snipe Class Sail Boat. The list follows below:

- 1 Sheet Traveler, Fig. No. 647
- 2 Boom Fitting, Fig. No. 643-A
- 3 Chain Plates, Fig. No. 630
- 4 Double Stay Tang, Fig. No. 630-B, for Mast for Side Stays
- 5 Single Stay Tang, Fig. No. 630-A, for Mast for Fore Stay
- 6 Turnbuckles: (for Guy Tighteners for Side and Fore Stays)
Galv. Hook and Eye, Fig. No. 301
Pol. Bronze Jaw and Eye, No. 316
- 7 Manila Rope for Main Halliard
- 8 Manila Rope (25 ft. for Main Sheet, 30 ft. for Jib Halliard)
- 9 Galv. Rigging Rope (for Side and Fore Stays)
- 10 Braided Cotton Line (for Jib Sheet)
- 11 Blocks for Main Sheet:
Single Swivel Eye, Fig. No. 366
Single Fast Eye with becket, Fig. No. 370
- 12 Screw Anchor Shackle, Fig. No. 290, (for Block on Traveler)
- 13 Common Bushed Sheave Only, Fig. No. 849, (to be mortised into upper mast for Main Halliard)
- 14 Single Cheek Halliard Block, Fig. No. 382, (for Jib Halliard to go at foot of Mast)
- 15 Single Cheek Halliard Block, Fig. No. 382, (for Main Halliard to go at foot of Mast)
- 16 Single Fast Eye Block, Fig. No. 368, complete with $\frac{1}{4}$ " Screw Anchor Shackle (for upper Jib Halliard)
- 17 Bronze Headboard Snap Shackle, Fig. No. 289 (for peak of sail)
- 18 Snap Hooks, Fig. No. 249, (for head and foot of Jib)
- 19 Open Base Boat Cleats, Fig. No. 401, (2 for Main Sheet, 1 for Main Halliard, 1 for Jib Halliard)
- 20 Square Base Boat Cleats, Fig. No. 400, (for Jib Sheet)
- 21 Brass Lip Leaders, Fig. No. 5811, (for deck lead, for Jib Sheet)
- 22 Bow Chocks, Fig. No. 414
- 23 Open Base Boat Cleat, Fig. No. 401, (for mooring cleat)
- 24 Shoulder Nut Eye Bolt with washer (or Jib Stay at deck)
Galv. Fig. No. 222
Pol. Bronze, Fig. 2220
- 25 Nickel Silver Sail Track, Fig. No. 120
- 26 Galv. Yacht Wire Rope Thimbles, Fig. No. 325, (for lower end of Side and Jib Stays, thimbles for upper ends furnished with Tangs)
- 27 Screw Rudder Braces, Fig. No. 459
- 28 Jib Snap Hooks, Fig. No. 250, (for holding Jib to Fore Stay, should be supplied by sailmaker all attached to sail)
- 29 Nickel Silver Sail Slides, Fig. No. 120-S, (for Main Sail, should be supplied by sailmaker all attached to sail)
- 30 Flexible Wire Rope (required only when Pivot Type Centerboard is used)
Galvanized
Bronze
- 31 Manila Rope (required only when Pivot Type Centerboard is used)
- 32 Wire Rope Thimbles: (required only when Pivot Type Centerboard is used)
Galv. Fig. No. 323
Bronze, Fig. No. 3230
- 33 Galv. Pivot Type Centerboard Hoisting Strap (required only when Pivot Type Centerboard is used)
- 34 Single Swivel Eye Block, Fig. No. 366, (required only when Pivot Type Centerboard is used)
- 35 Single Deck Block, Fig. No. 386, (required only when Pivot Type Centerboard is used)
- 36 Open Base Boat Cleat, Fig. No. 401, (required only when Pivot Type Centerboard is used)
- 37 Manila Rope (required only if rope bridle is used for Boom instead of regular sheet traveler)
- 38 Single Swivel Eye Block, Fig. No. 366, (required only if rope bridle is used instead of regular sheet traveler) (for boom)
- 39 Single Swivel Eye Blocks on Plate, Fig. No. 381, (required only if rope bridle is used for Boom instead of regular sheet traveler) (for quarter deck)
- 40 Open Base Cleats, Fig. No. 401, (required only if rope bridle is used for Boom instead of regular sheet traveler)
- 41 Gal. "Dagger" Type Centerboard, Fig. No. 461-A
- 42 Galv. "Pivot" Type Centerboard, Fig. No. 461-B

GENERAL INDEX

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